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Executive Report on Large Corporate Pension Plans 1983

Actuarial Costs and Liabilities

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Introduction

The 1983 *Executive Report on Large Corporate Pension Plans* presents the findings of our sixth annual study of:

- the effect of annual pension cost on the continuing operations of large corporations and
- the adequacy of pension plan funds to pay promised benefits.

As explained in the section on Method, our study is based on data gleaned from the annual reports of the Fortune 500 Largest Industrial Companies and four categories of Fortune Largest Service Companies (banks, retailers, transportation firms, and utilities).

In order to determine the answer to our first inquiry—the impact of pension cost on corporate operations—we compare each company's expense to three items: pretax profits, the size of the workforce, and the level of compensation (Exhibits 3 through 5).

With respect to our second inquiry—the adequacy of pension funds to pay promised benefits—we examine the relationships between the value of the plans' assets and the value of accumulated plan benefits (both vested and non-vested). Any unfunded amounts are also compared with each company's net worth (Exhibits 6 through 9).

The 1983 Executive Report is the second report in which we estimate the plans' liability for vested accrued benefits on two alternative uniform interest rate assumptions. We do this in order to enhance the ability of a company to directly compare its own position against the results obtained for the various types of companies represented in our study. This also provides an objective basis for evaluating changes in the aggregate degree of funding.

The FASB has recently presented new standards for pension accounting (the so-called "Preliminary Views") that would dramatically alter disclosure requirements for defined benefit pension plans. The current practice of merely disclosing expense in a footnote will be replaced by more extensive requirements. These include:

- a balance sheet entry for unfunded liabilities (or excess assets),
- use of a uniform cost method,
- recognition of future salary increases in the calculation of the balance sheet entry (where appropriate), and
- use of assumptions consistent with FASB Statement Number 36 requirements.

Highlights

Pension Cost

For the third consecutive fiscal year, the composite company in our study had no significant change in pension cost. In aggregate, these companies expensed $28.9 billion for pension plans (see Section 2).

For 1982, pension cost amounted to 13.6 percent of pretax profits for the composite Industrial firm—slightly above the previous record-high. We emphasize, though, that this particular ratio for the Fortune 500 companies has remained in the 12 to 14 percent range over the seven year period covered by our Executive Report series. During this same period we have witnessed two recessions and one recovery! (See Section 3.)

As shown in Section 4, the average company in this year's study incurred about $1,475 per employee in pension expense for 1982, compared to about $1,410 in 1981. These amounts represent 7.0 and 7.1 percent of compensation for 1982 and 1981, respectively. (This seemingly anomalous result is discussed in Section 5.)

Degree of Funding

The extent to which companies have funded the value of plan benefits is shown in the following table:

	Total Vested Benefits	Total Accumulated Benefits
Industrial Companies	94.7%	91.1%
Service Companies	97.5%	97.2%
All Companies	95.4%	92.5%
	(See Section 6.)	(See Section 7.)

Four fifths of the companies represented in the above tables were fully funded with respect to their *vested* benefits; two thirds were fully funded with respect to total accumulated (vested and nonvested) benefits.

Another useful way to look at the degree of funding is to evaluate unfunded liabilities as a percentage of corporate net worth. The following table shows this ratio:

	Percentage of Net Worth Required to Fully Fund:	
	Vested Benefits	Total Accumulated Benefits
Industrial Companies	1.5%	2.8%
Service Companies	0.4%	0.6%
All Companies	1.1%	2.1%
	(See Section 8.)	(See Section 9.)

FASB Interest Rate Assumptions

The interest rate assumption used by the companies to value vested and total accumulated benefits (in compliance with FASB Statement Number 36) ranged from 5 to 15.9 percent. The average Industrial company used 7.89 percent and the average Service company used 7.75 percent. The most frequently used rate for 1982 was 8 percent, as shown in Appendix A.

Section 10 of this Report shows the approximate effect of using alternative uniform interest rate assumptions in the calculation of the companies' unfunded vested benefits. The following chart shows the number of companies with no unfunded liabilities for vested benefits on three bases: The actual rate disclosed by each company, a uniform 7 percent interest rate assumption for all companies, and a uniform 9¼ percent interest rate assumption for all companies.

	Number of Companies with No Unfunded Vested Benefits	
7 percent interest rate	367	(Total number of companies in sample is 550)
Actual interest rate disclosed by each company	438	
9¼ percent interest rate	490	

Conclusion

Pension cost for the typical company represented in our Report was a little over one eighth of pretax profits during the 1982 fiscal year—a relationship little changed from 1981.

With respect to the plan's ability to pay promised benefits, 80 percent of the companies represented in this Report had sufficient pension assets to fully fund the value of total vested benefits, according to the figures disclosed by each company under FASB Statement Number 36 in its 1982 annual report. Those companies without sufficient plan assets to fully fund vested benefits were able to cover 83 percent of such benefits.

In general, our study shows that recent hard economic times have not caused these plans to impose an unmanageable financial strain on their sponsors. This fact should encourage continuing support of corporate pension plans in the face of government efforts chipping away at the private pension system—particularly in view of the financial uncertainties associated with the alternatives.

Method

Data were extracted from each company's annual report to shareholders for the fiscal year ending in the period from April 1, 1981 through March 31, 1982. Annual pension cost figures generally represent only contributions to qualified retirement (including multiemployer) plans. The figures shown for vested benefits and total accumulated benefits nearly always represent only domestic defined benefit plans, since FASB Statement Number 36 does not require actuarial information with respect to plan benefits to be determined or reported for other types of plans. Information that is not shown in a company's annual report but is available from Fortune magazine (e.g., number of employees) was taken from Fortune.

Companies included in the survey are the Fortune 500 Largest Industrials and the companies in each of the four Fortune Service categories of 50 Largest Commercial Banking Companies, 50 Largest Retailing Companies, 50 Largest Transportation Companies, and 50 Largest Utilities. The Industrial companies included in this year's study were drawn from the 1983 Fortune directory; the Service companies were drawn from the 1982 Fortune directory. The companies are listed in Appendix B, but may be identified by another name (adopted subsequent to the publication of the Fortune directories).

Unless otherwise specified, references in the text to the "Industrial" and "Service" companies cover only those companies for which data are presented in the corresponding Exhibit. For all but one Exhibit, data are also provided by industry group as categorized by the U.S. Office of Management and Budget. A particular company's identification with one of the industry groups is determined on the basis of the information presented by Fortune.

Figures for 1982 and 1981 were taken from 1982 and 1981 annual reports, respectively. Figures in the text may refer to fiscal years prior to 1981, in which case such figures were taken from previous Executive Reports. Since the number of companies included in the survey changes from year to year, comparison of dollars and percentages with previous years is not exact. *This is especially relevant with respect to individual industry groups*—where results can change dramatically from year to year because a single company becomes reclassified in another industry group, or because a company significantly changes its financial position from one year to another. For example, the one company shown in the leather industry group in this Report is not the same company that represented this group in our previous Report.

We were assisted in the preparation of this Report by Standard & Poor's Compustat Services, Inc.

1.

"Ninety-five percent of the Fortune 500 companies are represented in this study."

Number of Companies surveyed, 1982

Data were examined for 94 percent of the 700 companies in the Fortune categories that we include in our study. Forty companies were not examined because they are either wholly owned by another company or are private companies.

An alphabetical list of the 660 companies for which data were examined is included in the Appendix.

Exhibit 1

Survey Participants, 1982

	Number of Companies in Fortune Universe	Number of Companies in J&H Survey	Percent of Fortune-Ranked Companies in J&H Survey
By Fortune 500 Rank			
Fortune 1-100	100	99	99%
Fortune 101-200	100	100	100%
Fortune 201-300	100	89	89%
Fortune 301-400	100	92	92%
Fortune 401-500	100	95	97%
Total	500	475	95%
By Industry Group			
Mining, crude oil production	11	11	100%
Food	57	50	88%
Tobacco	3	3	100%
Textiles, vinyl flooring	11	10	91%
Apparel	12	12	100%
Furniture	1	1	100%
Paper, fiber, and wood products	32	31	97%
Publishing, printing	15	14	93%
Chemicals	42	36	86%
Petroleum refining	39	37	95%
Rubber, plastic products	9	9	100%
Leather	1	1	100%
Glass, concrete, abrasives, gypsum	15	15	100%
Metal manufacturing	29	28	97%
Metal products	26	25	96%
Electronics, appliances	39	39	100%
Shipbuilding, railrd., trans. equip.	6	6	100%
Measuring, scient., photo equip.	18	17	94%
Motor vehicles	15	15	100%
Aerospace	16	16	100%
Pharmaceuticals	18	18	100%
Soaps, cosmetics	9	8	89%
Office equip. (incl. computers)	16	16	100%
Industrial & farm equipment	43	42	98%
Music instr., toys, sporting goods	4	4	100%
Beverages	13	11	85%
By Service Group			
Commercial banking	50	47	94%
Retailing	50	44	88%
Transportation	50	45	90%
Utilities	50	49	98%
Total	200	185	93%

2.

"The composite Fortune 500 company spent $45 million for pensions in 1982."

Change in Pension Cost, 1982 from 1981

Last year's Executive Report showed the first decrease in average Industrial pension cost since our first published survey in 1978. This year's figures continue that trend; the composite company in our Industrial universe reported a 1.3 percent decrease in pension cost from 1981 to 1982. Again this year, the Service companies reported a small increase in pension cost (about 4 percent for the 1981-1982 period), up from an increase of about 1 percent indicated for the 1980-1981 period shown in last year's Report.

The slight changes in pension cost described above amount to virtually no change in the total pension cost expensed by all the companies in our study. This result is not surprising in view of the generally lower workforce levels associated with the recent recession. As we might also expect, the Service companies were not hit quite so hard as the Industrial companies.

Other factors tending to produce smaller pension costs are favorable investment experience during 1980 and 1981, as well as changes in actuarial assumptions.

As you can see from Exhibit 2 on pages 10 and 11, fourteen companies in our study show 1982 pension costs more than 50 percent higher than for 1981. Large increases are often attributable to mergers, acquisitions, or the adoption of additional plans.

It is good to see that the recent drop in inflation extends to pension plan expense. However, the recessionary aspect of our economy continues to influence the ease with which companies pay such expenses—a topic explored in the next section.

Change in Pension Cost, 1982 from 1981

Fortune 500 Companies
Average Change: −1.3%

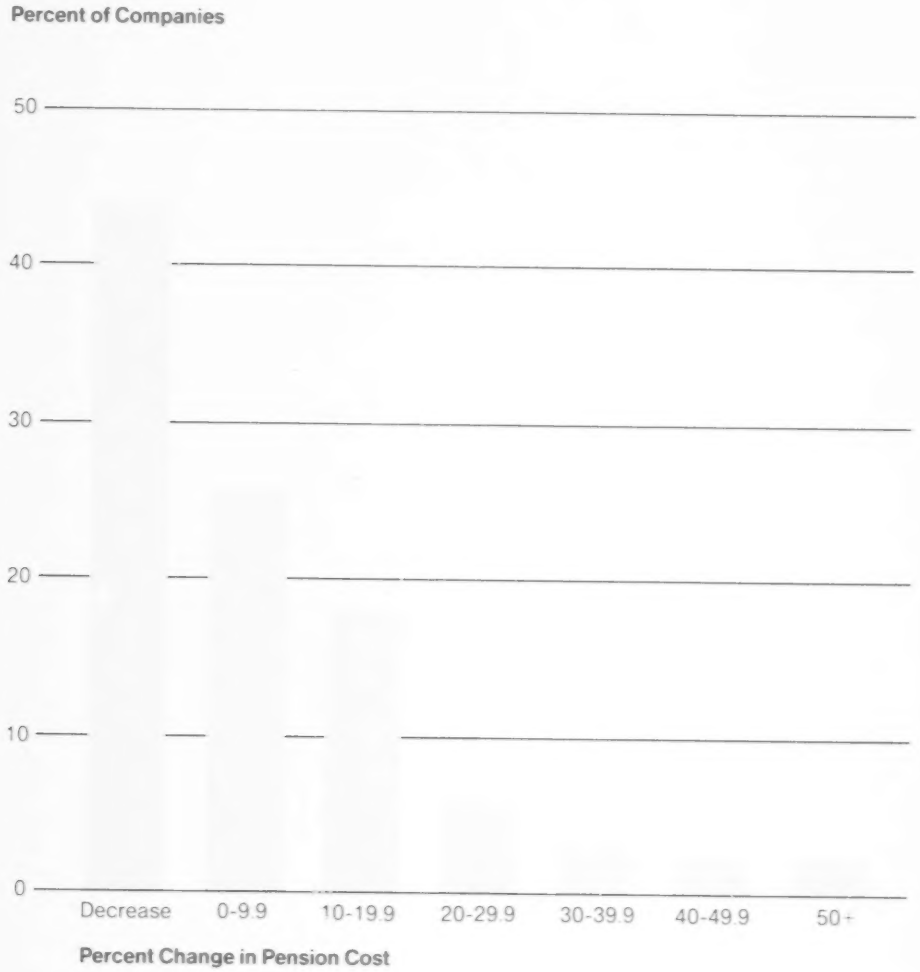

Exhibit 2

Change in Pension Cost, 1982 from 1981

By Fortune 500 Rank	Number of Companies	1982 Pension Cost ($ Millions)	1981 Pension Cost ($ Millions)	Composite Change
Fortune 1-100	96	$14,406.4	$14,593.0	– 1.3%
Fortune 101-200	96	3,392.1	3,374.8	0.5%
Fortune 201-300	86	1,340.2	1,405.4	– 4.6%
Fortune 301-400	90	924.1	951.0	– 2.8%
Fortune 401-500	89	489.9	500.9	– 2.2%
Total	457	$20,552.7	$20,825.1	– 1.3%
By Industry Group				
Mining, crude oil production	11	$ 196.3	$ 171.7	14.3%
Food	47	838.7	844.8	– 0.7%
Tobacco	3	270.3	244.4	10.6%
Textiles, vinyl flooring	10	85.3	92.6	– 7.9%
Apparel	11	121.8	131.3	– 7.2%
Furniture	1	1.0	2.0	–50.0%
Paper, fiber, and wood products	30	524.2	550.1	– 4.7%
Publishing, printing	14	213.8	195.9	9.1%
Chemicals	36	1,628.7	1,557.3	4.6%
Petroleum refining	35	2,710.4	2,815.6	– 3.7%
Rubber, plastic products	9	313.3	376.6	–16.8%
Leather	1	5.2	4.8	8.3%
Glass, concrete, abrasives, gypsum	15	399.6	421.8	– 5.3%
Metal manufacturing	27	1,568.0	1,610.4	– 2.6%
Metal products	24	448.5	485.0	– 7.5%
Electronics, appliances	36	2,135.4	2,177.7	– 1.9%
Shipbuilding, railrd., trans. equip.	6	138.7	126.6	9.5%
Measuring, scient., photo equip.	17	605.5	797.8	–24.1%
Motor vehicles	15	3,094.9	3,161.6	– 2.1%
Aerospace	16	1,566.9	1,482.2	5.7%
Pharmaceuticals	18	471.8	475.1	– 0.7%
Soaps, cosmetics	7	135.4	124.4	8.9%
Office equip. (incl. computers)	12	1,707.4	1,561.4	9.3%
Industrial & farm equipment	41	1,176.3	1,229.9	– 4.4%
Music instr., toys, sporting goods	4	24.7	26.0	– 5.0%
Beverages	11	170.6	158.3	7.8%
By Service Group				
Commercial banking	47	$ 594.3	$ 537.5	10.6%
Retailing	39	1,173.2	1,139.8	2.9%
Transportation	43	1,581.9	1,655.8	– 4.5%
Utilities	48	5,015.6	4,717.4	6.3%
Total	177	$ 8,365.0	$ 8,050.5	3.9%

Number of Companies (Percent of Sample)							Average Cost Per Company ($ Millions)	
Decrease	Increase of 0-9.9%	Increase of 10-19.9%	Increase of 20-29.9%	Increase of 30-39.9%	Increase of 40-49.9%	Increase of 50% or More	1982	1981
43 (45%)	29 (30%)	16 (17%)	4 (4%)	3 (3%)	1 (1%)	0 (0%)	$150.1	$152.0
43 (45%)	26 (27%)	18 (19%)	4 (4%)	2 (2%)	1 (1%)	2 (2%)	35.3	35.2
34 (40%)	24 (28%)	18 (21%)	6 (7%)	1 (1%)	0 (0%)	3 (3%)	15.6	16.3
45 (50%)	19 (21%)	12 (13%)	7 (8%)	3 (3%)	2 (2%)	2 (2%)	10.3	10.6
38 (43%)	19 (21%)	18 (20%)	5 (6%)	4 (5%)	4 (5%)	1 (1%)	5.5	5.6
203 (44%)	117 (26%)	82 (18%)	26 (6%)	13 (3%)	8 (2%)	8 (2%)	$ 45.0	$ 45.6
1 (9%)	1 (9%)	4 (36%)	3 (27%)	1 (9%)	0 (0%)	1 (9%)	$ 17.8	$ 15.6
17 (36%)	18 (38%)	7 (15%)	3 (6%)	1 (2%)	0 (0%)	1 (2%)	17.8	18.0
1 (33%)	0 (0%)	2 (67%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	90.1	81.5
6 (60%)	1 (10%)	0 (0%)	2 (20%)	0 (0%)	0 (0%)	1 (10%)	8.5	9.3
5 (45%)	2 (18%)	4 (36%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	11.1	11.9
1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1.0	2.0
14 (47%)	6 (20%)	6 (20%)	1 (3%)	1 (3%)	2 (7%)	0 (0%)	17.5	18.3
5 (36%)	1 (7%)	5 (36%)	3 (21%)	0 (0%)	0 (0%)	0 (0%)	15.3	14.0
19 (53%)	8 (22%)	9 (25%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	45.2	43.3
14 (40%)	9 (26%)	7 (20%)	2 (6%)	1 (3%)	1 (3%)	1 (3%)	77.4	80.4
6 (67%)	3 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	34.8	41.8
0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.2	4.8
9 (60%)	3 (20%)	2 (13%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	26.6	28.1
14 (52%)	6 (22%)	4 (15%)	0 (0%)	0 (0%)	2 (7%)	1 (4%)	58.1	59.6
14 (58%)	8 (33%)	2 (8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	18.7	20.2
15 (42%)	13 (36%)	3 (8%)	2 (6%)	3 (8%)	0 (0%)	0 (0%)	59.3	60.5
1 (17%)	2 (33%)	1 (17%)	1 (17%)	1 (17%)	0 (0%)	0 (0%)	23.1	21.1
9 (53%)	2 (12%)	6 (35%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	35.6	46.9
10 (67%)	3 (20%)	2 (13%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	206.3	210.8
4 (25%)	5 (31%)	4 (25%)	1 (6%)	0 (0%)	2 (13%)	0 (0%)	97.9	92.6
6 (33%)	7 (39%)	3 (17%)	1 (6%)	0 (0%)	0 (0%)	1 (6%)	26.2	26.4
1 (14%)	4 (57%)	0 (0%)	1 (14%)	1 (14%)	0 (0%)	0 (0%)	19.3	17.8
5 (42%)	1 (8%)	4 (33%)	1 (8%)	1 (8%)	0 (0%)	0 (0%)	142.3	130.1
21 (51%)	12 (29%)	4 (10%)	3 (7%)	0 (0%)	1 (2%)	0 (0%)	28.7	30.0
1 (25%)	0 (0%)	2 (50%)	0 (0%)	0 (0%)	0 (0%)	1 (25%)	6.2	6.5
4 (36%)	1 (9%)	1 (9%)	1 (9%)	3 (27%)	0 (0%)	1 (9%)	15.5	14.4
10 (21%)	11 (23%)	12 (26%)	5 (11%)	5 (11%)	2 (4%)	2 (4%)	$ 12.6	$ 11.4
12 (31%)	15 (38%)	9 (23%)	3 (8%)	0 (0%)	0 (0%)	0 (0%)	30.1	29.2
19 (44%)	12 (28%)	3 (7%)	0 (0%)	5 (12%)	0 (0%)	4 (9%)	36.8	38.5
4 (8%)	14 (29%)	18 (38%)	9 (19%)	2 (4%)	1 (2%)	0 (0%)	104.5	98.3
45 (25%)	52 (29%)	42 (24%)	17 (10%)	12 (7%)	3 (2%)	6 (3%)	$ 47.3	$ 45.5

3.

"Pension cost for the Fortune 500 companies has ranged from 12 to 14 percent of pretax profits for the past seven years."

Pension Cost As a Percentage of Pretax Profits, 1982 and 1981

Pension cost was 13.6 percent of pretax profits at the composite Industrial company in our study, the highest ratio ever reported in our series of Executive Reports. As in former years, we added pension cost to pretax profits so that the resulting ratio represents pension cost as a percentage of pretax profits before such pension costs were paid. Unlike former years, however, we assembled *all* the items in the development of each company's net income so that we could *uniformly* define pretax profits to include all earnings (or losses) except for minority interests and items of a non-recurring nature (such as discontinued operations). As a result of this change, the ratios shown in this Section differ slightly from comparable ratios in previous Reports.

Depressed profit levels caused an increase of nearly 2 percentage points in the ratio (from 11.7 to 13.6 percent). As you can see from Exhibit 3 on pages 14 and 15, over twice as many companies have a higher ratio than have a lower ratio compared to last year (273 vs. 110 companies, respectively).

Now for the good news. The Service companies included in Exhibit 3 show a slight decrease in the composite ratio of pension cost to pretax profit, continuing the trend established in last year's Executive Report for these companies. We hope that this is a harbinger of better things to come for the Industrials next year. Even so, this section of our study indicates that pension costs continue to be a manageable expense in relation to profitability—even when beset by hard economic times.

A word of caution in interpreting these ratios: The overall *composite* ratios shown in Exhibit 3 (as well as throughout this Report) are not arithmetic averages, but are weighted by the magnitude of each individual company's figures. Thus, for the utilities group, for example, although the composite company had pension costs equal to 14.0 percent of pretax profits, thirty-nine companies out of forty-eight (81 percent of the sample) had individual ratios *under* 10 percent (as shown in the Exhibit).

Pension Cost as a Percent of Pretax Profits, 1982 and 1981

Fortune 500 Companies
1982 Average: 13.6%
1981 Average: 11.7%

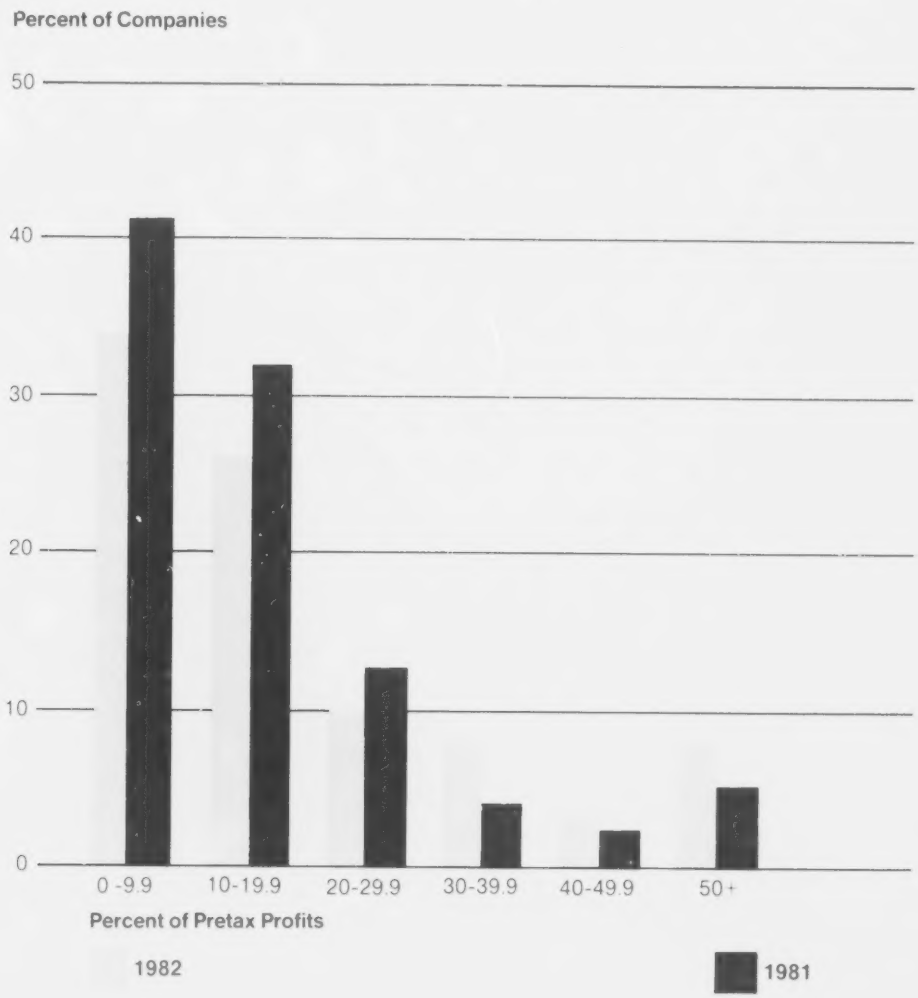

Exhibit 3

Pension Cost as a Percent of Pretax Profits, 1982 from 1981

By Fortune 500 Rank	Number of Companies	Pension Cost as a Percent of Pretax Profits (Composite) 1982	1981	0%-9.9% 1982	0%-9.9% 1981	10%-19.9% 1982	10%-19.9% 1981
Fortune 1-100	96	**13.6%**	11.4%	40 (42%)	41 (43%)	16 (17%)	25 (26%)
Fortune 101-200	96	**13.5%**	12.8%	30 (31%)	34 (35%)	23 (24%)	32 (33%)
Fortune 201-300	86	**12.5%**	10.6%	29 (34%)	43 (50%)	31 (36%)	27 (31%)
Fortune 301-400	90	**16.0%**	13.9%	25 (28%)	32 (36%)	24 (27%)	28 (31%)
Fortune 401-500	89	**12.5%**	12.0%	33 (37%)	36 (40%)	24 (27%)	32 (36%)
Total	457	**13.6%**	11.7%	157 (34%)	186 (41%)	118 (26%)	144 (32%)
By Industry Group							
Mining, crude oil production	11	**5.7%**	3.5%	5 (45%)	8 (73%)	2 (18%)	1 (9%)
Food	47	**10.8%**	10.0%	24 (51%)	23 (49%)	14 (30%)	13 (28%)
Tobacco	3	**7.0%**	7.3%	3 (100%)	2 (67%)	0 (0%)	1 (33%)
Textiles, vinyl flooring	10	**19.5%**	12.1%	4 (40%)	4 (40%)	1 (10%)	3 (30%)
Apparel	11	**11.7%**	11.0%	3 (27%)	5 (45%)	6 (55%)	5 (45%)
Furniture	1	**.0%**	7.8%	0 (0%)	1 (100%)	0 (0%)	0 (0%)
Paper, fiber, and wood products	30	**19.2%**	12.0%	3 (10%)	10 (33%)	11 (37%)	13 (43%)
Publishing, printing	14	**9.0%**	8.6%	8 (57%)	10 (71%)	5 (36%)	4 (29%)
Chemicals	36	**16.4%**	12.8%	10 (28%)	18 (50%)	12 (33%)	15 (42%)
Petroleum refining	35	**6.0%**	4.8%	27 (77%)	25 (71%)	5 (14%)	4 (11%)
Rubber, plastic products	9	**29.6%**	25.7%	1 (11%)	0 (0%)	1 (11%)	3 (33%)
Leather	1	**39.7%**	15.5%	0 (0%)	0 (0%)	0 (0%)	1 (100%)
Glass, concrete, gypsum	15	**41.6%**	22.3%	0 (0%)	1 (7%)	0 (0%)	5 (33%)
Metal manufacturing	27	**36.7%**	29.4%	4 (15%)	6 (22%)	1 (4%)	3 (11%)
Metal products	24	**16.9%**	16.5%	7 (29%)	9 (38%)	11 (46%)	11 (46%)
Electronics, appliances	36	**18.9%**	17.4%	9 (25%)	10 (28%)	13 (36%)	15 (42%)
Shipbldg., railrd., trans. equip.	6	**34.3%**	19.6%	0 (0%)	0 (0%)	1 (17%)	3 (50%)
Measuring scient., photo equip.	17	**11.7%**	12.1%	6 (35%)	5 (29%)	6 (35%)	8 (53%)
Motor vehicles	15	**72.6%**	54.9%	1 (7%)	2 (13%)	2 (13%)	1 (7%)
Aerospace	16	**32.1%**	26.8%	0 (0%)	1 (6%)	1 (6%)	5 (31%)
Pharmaceuticals	18	**6.1%**	6.9%	16 (89%)	14 (78%)	1 (6%)	1 (6%)
Soaps, cosmetics	7	**8.7%**	7.4%	5 (71%)	6 (86%)	2 (29%)	1 (14%)
Office equip. (incl. computers)	12	**13.6%**	14.6%	3 (25%)	5 (42%)	5 (42%)	5 (42%)
Industrial & farm equipment	41	**18.3%**	14.0%	8 (20%)	10 (24%)	15 (37%)	19 (46%)
Music inst., toys, sportg. goods	4	**6.4%**	9.1%	2 (50%)	2 (50%)	1 (25%)	2 (50%)
Beverages	11	**6.7%**	6.2%	8 (73%)	9 (82%)	2 (18%)	1 (9%)
By Service Group							
Commercial banking	47	**6.7%**	6.2%	35 (74%)	39 (83%)	6 (13%)	6 (13%)
Retailing	39	**14.5%**	16.2%	19 (49%)	17 (44%)	11 (28%)	10 (26%)
Transportation	43	**20.4%**	18.4%	11 (26%)	15 (35%)	3 (7%)	3 (7%)
Utilities	48	**14.0%**	14.5%	39 (81%)	39 (81%)	8 (17%)	7 (15%)
Total	177	**13.7%**	14.0%	104 (59%)	110 (62%)	28 (16%)	26 (15%)

Number of Companies (Percent of Sample)

20%-29.9%		30%-39.9%		40%-49.9%		At Least 50%		Company Had Pretax Loss; Percent Not Calculable		Companies where Pension Cost as a Percent of Pretax Profits		
1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	Increased 1982	Decreased 1982	No Change 1982
13 (14%)	19 (20%)	10 (10%)	3 (3%)	3 (3%)	2 (2%)	8 (8%)	2 (2%)	6 (6%)	4 (4%)	57 (59%)	24 (25%)	9 (9%)
8 (8%)	11 (11%)	8 (8%)	6 (6%)	5 (5%)	3 (3%)	9 (9%)	6 (6%)	13 (14%)	4 (4%)	62 (65%)	15 (16%)	6 (6%)
9 (10%)	10 (12%)	4 (5%)	3 (3%)	0 (0%)	0 (0%)	4 (5%)	1 (1%)	9 (10%)	2 (2%)	54 (63%)	21 (24%)	2 (2%)
9 (10%)	11 (12%)	9 (10%)	4 (4%)	4 (4%)	3 (3%)	10 (11%)	5 (6%)	9 (10%)	7 (8%)	56 (62%)	23 (26%)	2 (2%)
8 (9%)	9 (10%)	6 (7%)	2 (2%)	0 (0%)	1 (1%)	6 (7%)	7 (8%)	12 (13%)	2 (2%)	44 (49%)	27 (30%)	6 (7%)
47 (10%)	60 (13%)	37 (8%)	18 (4%)	12 (3%)	9 (2%)	37 (8%)	21 (5%)	49 (11%)	19 (4%)	273 (60%)	110 (24%)	25 (5%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (27%)	2 (18%)	1 (9%)	0 (0%)	8 (73%)	2 (18%)	0 (0%)
3 (6%)	5 (11%)	1 (2%)	0 (0%)	1 (2%)	0 (0%)	3 (6%)	2 (4%)	1 (2%)	4 (9%)	20 (43%)	21 (45%)	5 (11%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (33%)	2 (67%)
0 (0%)	1 (10%)	4 (40%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (10%)	1 (10%)	1 (10%)	9 (90%)	0 (0%)	0 (0%)
2 (18%)	1 (9%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (45%)	6 (55%)	0 (0%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
7 (23%)	6 (20%)	1 (3%)	0 (0%)	0 (0%)	1 (3%)	5 (17%)	0 (0%)	3 (10%)	0 (0%)	23 (77%)	3 (10%)	1 (3%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (7%)	0 (0%)	4 (29%)	7 (50%)	2 (14%)
8 (22%)	3 (8%)	3 (8%)	0 (0%)	1 (3%)	0 (0%)	0 (0%)	0 (0%)	2 (6%)	0 (0%)	30 (83%)	4 (11%)	0 (0%)
0 (0%)	2 (6%)	0 (0%)	0 (0%)	1 (3%)	0 (0%)	2 (6%)	1 (3%)	0 (0%)	3 (9%)	25 (71%)	7 (20%)	3 (9%)
2 (22%)	4 (44%)	0 (0%)	1 (11%)	1 (11%)	0 (0%)	3 (33%)	1 (11%)	1 (11%)	0 (0%)	5 (56%)	3 (33%)	0 (0%)
0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)
2 (13%)	4 (27%)	3 (20%)	1 (7%)	2 (13%)	2 (13%)	5 (33%)	1 (7%)	3 (20%)	1 (7%)	10 (67%)	2 (13%)	0 (0%)
1 (4%)	5 (19%)	2 (7%)	5 (19%)	0 (0%)	3 (11%)	2 (7%)	4 (15%)	17 (63%)	1 (4%)	9 (33%)	0 (0%)	1 (4%)
2 (8%)	2 (8%)	1 (4%)	1 (4%)	0 (0%)	1 (4%)	1 (4%)	0 (0%)	2 (8%)	0 (0%)	14 (58%)	6 (25%)	2 (8%)
5 (14%)	6 (17%)	3 (8%)	3 (8%)	2 (6%)	0 (0%)	1 (3%)	1 (3%)	3 (8%)	1 (3%)	21 (58%)	7 (19%)	5 (14%)
2 (33%)	2 (33%)	2 (33%)	0 (0%)	0 (0%)	0 (0%)	1 (17%)	1 (17%)	0 (0%)	0 (0%)	5 (83%)	1 (17%)	0 (0%)
2 (12%)	1 (6%)	0 (0%)	1 (6%)	0 (0%)	0 (0%)	1 (6%)	0 (0%)	2 (12%)	1 (6%)	12 (71%)	3 (18%)	0 (0%)
2 (13%)	4 (27%)	2 (13%)	1 (7%)	0 (0%)	1 (7%)	3 (20%)	2 (13%)	5 (33%)	4 (27%)	7 (47%)	3 (20%)	0 (0%)
5 (31%)	3 (19%)	7 (44%)	3 (19%)	1 (6%)	1 (6%)	2 (13%)	3 (19%)	0 (0%)	0 (0%)	11 (69%)	5 (31%)	0 (0%)
0 (0%)	1 (6%)	1 (6%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)	1 (6%)	0 (0%)	0 (0%)	6 (33%)	9 (50%)	3 (17%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (71%)	2 (29%)	0 (0%)
1 (8%)	2 (17%)	2 (17%)	0 (0%)	1 (8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (50%)	6 (50%)	0 (0%)
3 (7%)	8 (20%)	4 (10%)	1 (2%)	2 (5%)	0 (0%)	4 (10%)	1 (2%)	5 (12%)	2 (5%)	28 (68%)	7 (17%)	1 (2%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (25%)	0 (0%)	2 (50%)	1 (25%)	0 (0%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (9%)	0 (0%)	0 (0%)	1 (9%)	7 (64%)	4 (36%)	0 (0%)
2 (4%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	3 (6%)	1 (2%)	22 (47%)	20 (43%)	2 (4%)
5 (13%)	4 (10%)	2 (5%)	4 (10%)	0 (0%)	2 (5%)	1 (3%)	0 (0%)	1 (3%)	2 (5%)	12 (31%)	25 (64%)	1 (3%)
4 (9%)	7 (16%)	5 (12%)	2 (5%)	2 (5%)	1 (2%)	8 (19%)	7 (16%)	10 (23%)	8 (19%)	24 (56%)	7 (16%)	2 (5%)
1 (2%)	2 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	19 (40%)	25 (52%)	4 (8%)
12 (7%)	13 (7%)	8 (5%)	6 (3%)	2 (1%)	4 (2%)	9 (5%)	7 (4%)	14 (8%)	11 (6%)	77 (44%)	77 (44%)	9 (5%)

4.

"Pension expense at the average Fortune 500 company amounted to $1,489 per employee during 1982."

Change in Pension Cost Per Employee, 1982 from 1981

Average pension cost per employee rose from $1,405 in 1981 to $1,489 in 1982 for the Industrial companies, as shown in Exhibit 4 on pages 18 and 19. A major factor contributing to this increase was the drop in employment levels—about 15 percent—for these companies. The Service companies experienced a 1.5 percent increase in pension cost, together with a slight increase in employment levels from 1981 to 1982.

The largest increases among the industry groups having statistically significant representation (i.e., ten or more companies) occurred in the metal manufacturing, mining, chemical, and industrial equipment groups. The metal manufacturing group of 27 companies also shows the highest pension cost per employee—$2,584.

Average pension cost per employee for all the companies in our study was approximately $1,475. Please note that the number of employees typically includes all of the workforce, not just the retirement plan participants.

The related ratio of pension cost as a percentage of compensation is shown in the next section of this Report.

Change in Pension Cost per Employee, 1982 from 1981

Fortune 500 Companies
Average Change: +6.0%

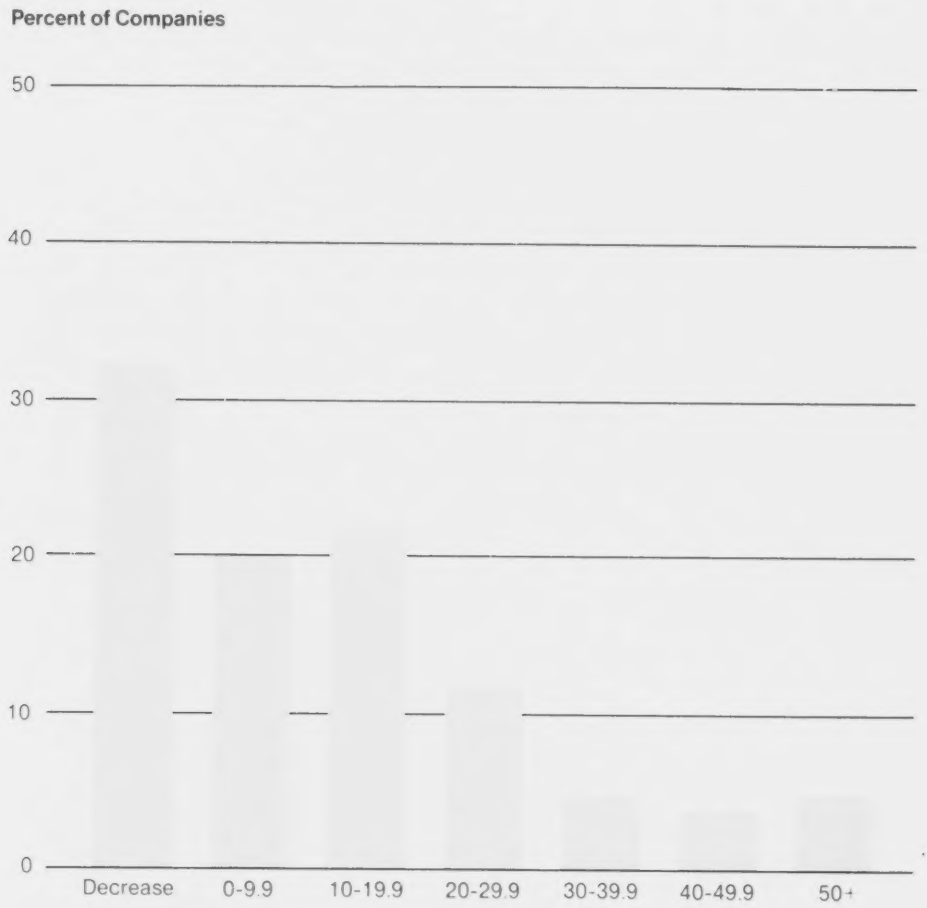

Exhibit 4

Change in Pension Cost per Employee, 1982 from 1981

By Fortune 500 Rank	Number of Companies	Composite Change per Employee	Decrease
Fortune 1-100	95	5.6%	32 (34%)
Fortune 101-200	95	8.3%	27 (28%)
Fortune 201-300	86	3.3%	21 (24%)
Fortune 301-400	90	5.2%	29 (32%)
Fortune 401-500	89	5.4%	36 (40%)
Total	455	6.0%	145 (32%)
By Industry Group			
Mining, crude oil production	11	19.2%	0 (0%)
Food	47	2.7%	18 (38%)
Tobacco	3	– 3.1%	2 (67%)
Textiles, vinyl flooring	10	3.9%	3 (30%)
Apparel	11	– 0.5%	5 (45%)
Furniture	1	–41.0%	1 (100%)
Paper, fiber, and wood products	30	– 0.7%	13 (43%)
Publishing, printing	14	2.7%	6 (43%)
Chemicals	36	15.4%	9 (25%)
Petroleum refining	34	3.0%	13 (38%)
Rubber, plastic products	8	– 7.7%	6 (75%)
Leather	1	22.9%	0 (0%)
Glass, concrete, abrasives, gypsum	15	3.8%	4 (27%)
Metal manufacturing	27	29.4%	6 (22%)
Metal products	24	8.6%	5 (21%)
Electronics, appliances	36	6.0%	11 (31%)
Shipbuilding, railrd., trans. equip.	6	1.7%	1 (17%)
Measuring, scient., photo equip.	17	–19.1%	4 (24%)
Motor vehicles	15	10.1%	5 (33%)
Aerospace	16	10.4%	2 (13%)
Pharmaceuticals	18	– 3.7%	8 (44%)
Soaps, cosmetics	7	9.8%	2 (29%)
Office equip. (incl. computers)	12	8.6%	5 (42%)
Industrial & farm equipment	41	13.4%	9 (22%)
Music instr., toys, sporting goods	4	– 8.3%	2 (50%)
Beverages	11	– 7.1%	5 (45%)
By Service Group			
Commercial banking	47	7.1%	18 (38%)
Retailing	38	1.6%	14 (37%)
Transportation	41	1.4%	15 (37%)
Utilities	48	– 2.2%	8 (17%)
Total	174	1.5%	55 (32%)

Number of Companies (Percent of Sample)						Average Cost per Employee (in Dollars)	
Increase of 0-9.9%	Increase of 10-19.9%	Increase of 20-29.9%	Increase of 30-39.9%	Increase of 40-49.9%	Increase of 50% or More	1982	1981
23 (24%)	22 (23%)	8 (8%)	3 (3%)	5 (5%)	2 (2%)	$1,750	$1,658
24 (25%)	21 (22%)	12 (13%)	2 (2%)	3 (3%)	6 (6%)	1,219	1,125
19 (22%)	23 (27%)	10 (12%)	7 (8%)	1 (1%)	5 (6%)	995	963
18 (20%)	16 (18%)	12 (13%)	7 (8%)	5 (6%)	3 (3%)	1,037	986
8 (9%)	19 (21%)	12 (13%)	6 (7%)	2 (2%)	6 (7%)	885	840
92 (20%)	101 (22%)	54 (12%)	25 (5%)	16 (4%)	22 (5%)	$1,489	$1,405
2 (18%)	3 (27%)	1 (9%)	0 (0%)	1 (9%)	4 (36%)	$1,870	$1,569
12 (26%)	8 (17%)	6 (13%)	1 (2%)	1 (2%)	1 (2%)	727	708
0 (0%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1,126	1,162
0 (0%)	3 (30%)	2 (20%)	1 (10%)	0 (0%)	1 (10%)	427	411
2 (18%)	2 (18%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	398	400
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	94	159
5 (17%)	7 (23%)	1 (3%)	1 (3%)	3 (10%)	0 (0%)	1,088	1,096
2 (14%)	5 (36%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	1,062	1,034
8 (22%)	11 (31%)	6 (17%)	0 (0%)	2 (6%)	0 (0%)	1,804	1,563
8 (24%)	4 (12%)	4 (12%)	1 (3%)	3 (9%)	1 (3%)	2,170	2,108
0 (0%)	1 (13%)	1 (13%)	0 (0%)	0 (0%)	0 (0%)	1,105	1,197
0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	327	266
3 (20%)	4 (27%)	2 (13%)	1 (7%)	0 (0%)	1 (7%)	1,482	1,427
2 (7%)	3 (11%)	3 (11%)	4 (15%)	2 (7%)	7 (26%)	3,344	2,584
7 (29%)	5 (21%)	4 (17%)	3 (13%)	0 (0%)	0 (0%)	1,282	1,181
11 (31%)	9 (25%)	2 (6%)	2 (6%)	0 (0%)	1 (3%)	1,148	1,083
1 (17%)	1 (17%)	2 (33%)	1 (17%)	0 (0%)	0 (0%)	1,122	1,103
3 (18%)	7 (41%)	2 (12%)	0 (0%)	1 (6%)	0 (0%)	1,132	1,400
5 (33%)	2 (13%)	2 (13%)	1 (7%)	0 (0%)	0 (0%)	2,126	1,930
2 (13%)	7 (44%)	2 (13%)	0 (0%)	2 (13%)	1 (6%)	1,906	1,726
6 (33%)	4 (22%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	859	892
2 (29%)	2 (29%)	0 (0%)	1 (14%)	0 (0%)	0 (0%)	893	813
2 (17%)	2 (17%)	3 (25%)	0 (0%)	0 (0%)	0 (0%)	1,850	1,704
7 (17%)	9 (22%)	5 (12%)	6 (15%)	1 (2%)	4 (10%)	1,431	1,262
0 (0%)	0 (0%)	1 (25%)	1 (25%)	0 (0%)	0 (0%)	375	409
2 (18%)	1 (9%)	1 (9%)	1 (9%)	0 (0%)	1 (9%)	663	714
6 (13%)	12 (26%)	4 (9%)	3 (6%)	2 (4%)	2 (4%)	$ 979	$ 914
15 (39%)	6 (16%)	2 (5%)	1 (3%)	0 (0%)	0 (0%)	453	446
9 (22%)	10 (24%)	2 (5%)	0 (0%)	1 (2%)	4 (10%)	1,759	1,735
16 (33%)	15 (31%)	8 (17%)	1 (2%)	0 (0%)	0 (0%)	2,920	2,985
46 (26%)	43 (25%)	16 (9%)	5 (3%)	3 (2%)	6 (3%)	$1,443	$1,422

5.

"Pension cost at the composite Fortune 500 company represented 6.4 percent of total employee compensation."

Pension Cost as a Percent of Compensation, 1982 and 1981

In contrast to pension cost per employee, the ratio of pension cost to compensation declined slightly from 1981 to 1982 (from 7.1 to 7.0 percent). Rising average compensation (even in the face of declining employment levels) and changes to actuarial assumptions are two major factors that could contribute to such an unexpected result.

Pension cost figures presented in this section reflect only those companies that disclosed compensation information. Because only about 40 percent of the companies included in our study reported conpensation information, Exhibit 5 on pages 22 and 23 does not break out statistics by industry group.

This is the first Report in which we have specifically included the cost of employee benefits whenever possible. This reflects the emerging social and legal perception of deferred compensation and other employee benefits as part of an employer's total remuneration. (We note also that most of the companies that report compensation information do not provide separate figures for wages and salaries only.) This change in methodology accounts for a slight decrease in the overall ratios relative to those shown in last year's comparable Exhibit.

Pension Cost as a Percent of Compensation, 1982 and 1981

Fortune 500 Companies
1982 Average: 6.4%
1981 Average: 6.5%

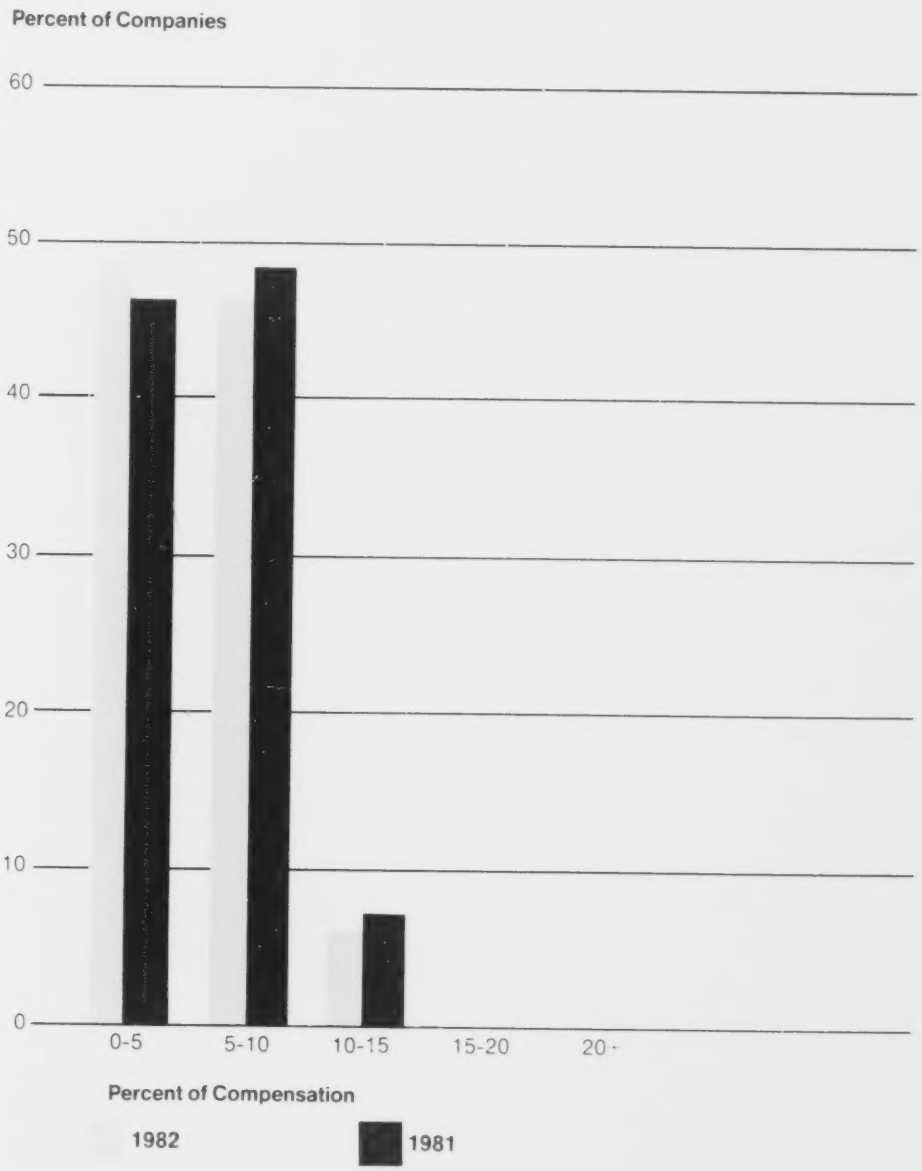

Exhibit 5

Pension Cost As a Percentage of Compensation, 1982 and 1981

		Number of Companies	Pension Cost ($ Millions) 1982	Pension Cost ($ Millions) 1981	Compensation ($ Millions) 1982	Compensation ($ Millions) 1981
By Fortune 500 Rank						
Fortune 1-100		53	$ 9,484.4	$ 9,661.4	$140,842.1	$142,362.8
Fortune 101-200		32	1,360.1	1,381.6	24,890.4	25,538.8
Fortune 201-300		27	489.0	510.5	10,351.9	10,608.2
Fortune 301-400		24	348.4	368.6	6,122.1	6,373.2
Fortune 401-500		11	91.5	92.5	1,613.1	1,465.6
	Total	147	$11,773.4	$12,014.6	$183,819.6	$186,348.6
By Service Group						
Commercial banking		47	$ 594.3	$ 537.5	$ 14,568.1	$ 12,731.0
Transportation		20	1,117.5	1,136.2	20,198.9	18,686.6
Utilities		34	4,419.0	4,180.3	39,002.3	33,601.6
	Total	101	$ 6,130.8	$ 5,854.0	$ 73,769.3	$ 65,019.2

Pension Cost as a Percent of Compensation (Composite)		Number of Companies (Percent of Sample)									
		Pension Cost=0-4.9% of Compensation		Pension Cost=5-9.9% of Compensation		Pension Cost=10-14.9% of Compensation		Pension Cost=15-19.9% of Compensation		Pension Cost=20% or More of Compensation	
1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981
6.7%	6.8%	18 (34%)	16 (30%)	32 (60%)	33 (62%)	3 (6%)	4 (8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
5.5%	5.4%	18 (56%)	16 (50%)	11 (34%)	15 (47%)	3 (9%)	1 (3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
4.7%	4.8%	15 (56%)	15 (56%)	12 (44%)	11 (41%)	0 (0%)	1 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
5.7%	5.8%	13 (54%)	13 (54%)	10 (42%)	9 (38%)	1 (4%)	2 (8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
5.7%	6.3%	7 (64%)	7 (64%)	2 (18%)	2 (18%)	2 (18%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
6.4%	6.5%	71 (48%)	67 (46%)	67 (46%)	70 (48%)	9 (6%)	10 (7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
4.1%	4.2%	34 (72%)	34 (72%)	12 (26%)	12 (26%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	1 (2%)
5.5%	6.1%	6 (30%)	5 (25%)	13 (65%)	13 (65%)	1 (5%)	2 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
11.3%	12.4%	9 (26%)	6 (18%)	24 (71%)	26 (76%)	1 (3%)	1 (3%)	0 (0%)	1 (3%)	0 (0%)	0 (0%)
8.3%	9.0%	49 (49%)	45 (45%)	49 (49%)	51 (51%)	2 (2%)	3 (3%)	0 (0%)	1 (1%)	1 (1%)	1 (1%)

6.

"The average Fortune 500 company had plan assets of $451 million in 1982."

Funded Ratio: Vested Benefits

Fewer companies than last year are represented in those Exhibits in which FASB interest rates are evaluated (Exhibits 6, 7, and 10) because of the number of companies that do not report a *single* weighted average FASB interest rate assumption that was used in the calculation of the value of their plans' benefits. In order to ensure that our year-to-year ratios are comparable, we intend to include only those companies for which either a single weighted average FASB interest rate assumption is reported, or for which such a value can be closely estimated.

Exhibits 6 and 7 group the companies according to the degree of funding. The first section of each Exhibit shows the value of plan assets and the value of vested benefits for those companies that are fully funded, i.e., where the value of assets exceeds the value of vested benefits. The second section of each Exhibit shows similar data for companies that are not fully funded. The third section combines the data of both groups but limits the funded ratio to 100 percent for each company in the first group. This adjustment for the combined groups is designed to compensate for the effect of overfunded plans—thereby measuring the aggregate degree of funding more accurately.

Over four fifths of the companies were fully funded with respect to vested benefits. The 89 Industrial companies that were not fully funded had pension assets equal to 83.9 percent of vested benefits. The 22 Service companies with some unfunded benefits had a corresponding ratio of 79.6 percent.

The average FASB interest rate assumption is also shown for each Industry and Service group. Exhibit 10 on pages 26 and 27 shows the high and low FASB interest rate values for each group, together with the approximate effect of using alternative uniform interest rates in the calculation of unfunded vested benefits.

Comparison of Funded Ratios, 1982 and 1981 (Vested Benefits)

	Industrial Companies		Service Companies		All Companies	
	1982	1981	1982	1981	1982	1981
Number of Companies	402	456	148	171	550	627
Composite Funded Ratio	94.7%	93.9%	97.5%	97.5%	95.4%	94.7%
Average FASB Interest Rate	7.89%	7.58%	7.75%	7.44%	7.85%	7.54%

Exhibit 6

Funded Ratio: Vested Benefits (VB), 1982

	Net Assets = 100% or More of VB				
By Fortune 500 Rank	Number of Companies	Vested Benefits ($ Millions)	Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent of VB (Composite)
Fortune 1-100	71	$ 79,249.6	$ 99,356.5	8.06%	125.4%
Fortune 101-200	69	18,475.5	22,946.0	8.32%	124.2%
Fortune 201-300	55	5,520.0	7,338.5	7.75%	132.9%
Fortune 301-400	56	3,505.2	4,775.8	7.60%	136.2%
Fortune 401-500	62	2,071.3	2,691.4	7.70%	129.9%
Total	313	$108,821.6	$137,108.2	7.91%	126.0%
By Industry Group					
Mining, crude oil production	6	$ 350.9	$ 562.3	7.50%	160.2%
Food	31	4,595.3	5,682.9	8.15%	123.7%
Tobacco	2	956.2	1,356.5	7.75%	141.9%
Textiles, vinyl flooring	8	655.3	910.6	8.25%	139.0%
Apparel	8	504.3	679.5	7.25%	134.7%
Furniture	1	33.4	60.6	9.75%	181.4%
Paper, fiber, and wood products	23	4,555.0	5,472.2	8.24%	120.1%
Publishing, printing	11	921.9	1,346.2	7.45%	146.0%
Chemicals	27	11,947.9	17,500.7	8.10%	146.5%
Petroleum refining	29	19,938.7	24,021.7	7.61%	120.5%
Rubber, plastic products	4	2,534.9	3,064.8	10.98%	120.9%
Leather	0	0.0	0.0	0.00%	0.0%
Glass, concrete, gypsum	7	1,535.3	1,897.5	8.64%	123.6%
Metal manufacturing	13	3,912.2	4,321.7	8.28%	110.5%
Metal products	20	2,615.8	3,124.6	7.96%	119.5%
Electronics, appliances	19	10,505.9	12,906.9	7.75%	122.9%
Shipbuilding, railrd., trans. equip.	1	68.1	74.8	6.10%	109.8%
Measuring, scient., photo equip.	14	3,984.9	5,454.6	7.63%	136.9%
Motor vehicles	6	8,620.1	9,166.0	7.68%	106.3%
Aerospace	12	12,417.4	16,137.4	7.65%	130.0%
Pharmaceuticals	15	2,618.5	3,492.1	7.59%	133.4%
Soaps, cosmetics	7	703.4	984.4	7.44%	140.0%
Office equip. (incl. computers)	11	9,905.9	12,485.5	7.51%	126.0%
Industrial & farm equipment	26	3,972.4	4,947.9	7.77%	124.6%
Music instr., toys, sporting goods	3	250.5	428.0	7.97%	170.9%
Beverages	9	717.7	1,029.3	8.26%	143.4%
By Service Group					
Commercial banking	37	$ 3,738.8	$ 5,594.1	7.73%	149.6%
Retailing	29	3,402.0	4,838.9	7.81%	142.2%
Transportation	18	3,413.1	4,668.2	8.01%	136.8%
Utilities	42	31,276.9	50,683.6	7.92%	162.0%
Total	126	$41,830.8	$65,784.8	7.85%	157.3%

Net Assets = Less Than 100% of VB					Combined Figures—All Companies			
Number of Companies	Vested Benefits ($ Millions)	Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent of VB (Composite)	Number of Companies	Interest Assumption (Average)	NA as a Percent of VB (Adjusted Composite)	NA per Company (Average) ($ Millions)
15	$37,448.4	$32,178.9	8.84%	85.9%	86	8.20%	95.5%	$1,529.5
18	7,591.7	5,889.1	7.74%	77.6%	87	8.20%	93.5%	331.4
18	3,640.2	3,024.2	7.58%	83.1%	73	7.71%	93.3%	142.0
23	3,231.0	2,498.9	7.89%	77.3%	79	7.69%	89.1%	92.1
15	931.7	733.8	7.17%	78.8%	77	7.59%	93.4%	44.5
89	$52,843.0	$44,324.9	7.84%	83.9%	402	7.89%	94.7%	$ 451.3
1	$ 92.3	$ 82.9	6.50%	89.8%	7	7.36%	97.9%	$ 92.2
11	1,505.3	1,170.4	7.67%	77.8%	42	8.03%	94.5%	163.2
1	382.3	335.6	8.00%	87.8%	3	7.83%	96.5%	564.0
2	69.2	44.5	7.50%	64.3%	10	8.10%	96.6%	95.5
2	173.9	154.0	7.80%	88.6%	10	7.36%	97.1%	83.3
0	0.0	0.0	0.00%	0.0%	1	9.75%	100.0%	60.6
6	916.9	829.6	7.28%	90.5%	29	8.04%	98.4%	217.3
0	0.0	0.0	0.00%	0.0%	11	7.45%	100.0%	122.4
6	1,706.5	1,599.3	7.58%	93.7%	33	8.00%	99.2%	578.8
2	155.7	151.4	7.50%	97.2%	31	7.60%	100.0%	779.8
2	770.3	319.3	8.60%	41.5%	6	10.18%	86.4%	564.0
1	78.3	57.6	8.00%	73.6%	1	8.00%	73.6%	57.6
6	1,386.0	1,260.8	8.25%	91.0%	13	8.46%	95.7%	242.9
13	11,141.2	9,014.5	8.68%	80.9%	26	8.48%	85.9%	512.9
4	1,184.2	1,103.3	8.00%	93.2%	24	7.96%	97.9%	176.2
6	3,475.0	3,240.5	7.54%	93.3%	25	7.70%	98.3%	645.9
3	831.7	639.0	7.17%	76.8%	4	6.90%	78.6%	178.4
2	126.9	110.5	7.00%	87.1%	16	7.55%	99.6%	347.8
8	23,869.2	19,889.7	8.59%	83.3%	14	8.20%	87.8%	2,075.4
1	214.5	195.9	8.50%	91.3%	13	7.72%	99.9%	1,256.4
2	578.5	519.7	7.00%	89.8%	17	7.52%	98.2%	236.0
0	0.0	0.0	0.00%	0.0%	7	7.44%	100.0%	140.6
0	0.0	0.0	0.00%	0.0%	11	7.51%	100.0%	1,135.0
9	4,182.9	3,604.5	7.13%	86.2%	35	7.60%	92.9%	244.4
1	2.2	1.8	8.00%	81.8%	4	7.98%	99.8%	107.5
0	0.0	0.0	0.00%	0.0%	9	8.26%	100.0%	114.4
1	$ 12.3	$ 11.1	7.00%	90.2%	38	7.71%	100.0%	$ 147.5
5	260.2	211.9	7.70%	81.4%	34	7.79%	98.7%	148.6
11	3,443.0	2,400.3	7.14%	69.7%	29	7.68%	84.8%	243.7
5	2,029.6	1,950.6	6.80%	96.1%	47	7.80%	99.8%	1,119.9
22	$ 5,745.1	$ 4,573.9	7.18%	79.6%	148	7.75%	97.5%	$ 475.4

7.

"The aggregate value of the companies' net assets exceeds the aggregate value of total accumulated benefits."

Funded Ratio: Total Accumulated Benefits, 1982

The composite company in Exhibit 7 on pages 30 and 31 is nearly as funded with respect to total accumulated benefits as it is with respect to vested benefits: 91.1 versus 94.7 percent, respectively, for the Industrial companies; and 97.2 versus 97.5 percent, respectively, for the Service companies.

Almost two thirds of the companies in Exhibit 7 have fully funded their total accumulated benefits. Combined with the companies that are less than 100 percent funded, the aggregate degree of funding is 92.5 percent, after adjusting for the effect of overfunded plans as described in Section 6.

Comparison of Funded Ratios, 1982 and 1981 (Total Accumulated Benefits)

	Industrial Companies		Service Companies		All Companies	
	1982	1981	1982	1981	1982	1981
Number of Companies	402	456	147	171	549	627
Composite Funded Ratio	91.1%	89.4%	97.2%	96.4%	92.5%	91.0%
Average FASB Interest Rate	7.89%	7.58%	7.76%	7.44%	7.86%	7.54%

Exhibit 7

Funded Ratio: Total Accumulated Benefits (TAB), 1982

	Net Assets = 100% or More of TAB				
By Fortune 500 Rank	Number of Companies	Total Accumulated Benefits ($ Millions)	Total Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent of TAB (Composite)
Fortune 1-100	60	$ 68,316.7	$ 82,814.7	8.10%	**121.2%**
Fortune 101-200	51	12,856.1	15,995.4	8.23%	**124.4%**
Fortune 201-300	46	4,937.4	6,238.3	7.84%	**126.3%**
Fortune 301-400	50	3,304.4	4,197.7	7.69%	**127.0%**
Fortune 401-500	53	1,697.8	2,126.7	7.78%	**125.3%**
Total	260	$ 91,112.4	$111,372.8	7.94%	**122.2%**
By Industry Group					
Mining, crude oil production	6	$ 399.3	$ 562.3	7.50%	**140.8%**
Food	25	4,062.4	4,816.0	7.93%	**118.6%**
Tobacco	2	1,144.3	1,356.5	7.75%	**118.5%**
Textiles, vinyl flooring	8	721.9	910.6	8.25%	**126.1%**
Apparel	7	541.7	670.7	7.43%	**123.8%**
Furniture	1	35.2	60.6	9.75%	**172.2%**
Paper, fiber, and wood products	17	3,441.4	4,054.1	8.42%	**117.8%**
Publishing, printing	11	986.4	1,346.2	7.45%	**136.5%**
Chemicals	25	11,425.4	16,211.4	8.16%	**141.9%**
Petroleum refining	27	20,437.9	23,279.8	7.67%	**113.9%**
Rubber, plastic products	2	650.5	1,026.7	11.95%	**157.8%**
Leather	0	0.0	0.0	0.00%	**0.0%**
Glass, concrete, gypsum	6	1,538.0	1,762.0	8.75%	**114.6%**
Metal manufacturing	6	984.9	1,241.2	8.28%	**126.0%**
Metal products	14	1,414.6	1,687.8	8.01%	**119.3%**
Electronics, appliances	16	10,775.2	12,320.3	7.73%	**114.3%**
Shipbuilding, railrd., trans. equip.	0	0.0	0.0	0.00%	**0.0%**
Measuring, scient., photo equip.	11	4,173.8	5,149.6	7.70%	**123.4%**
Motor vehicles	4	1,665.9	1,872.4	8.03%	**112.4%**
Aerospace	9	9,481.0	11,953.5	7.76%	**126.1%**
Pharmaceuticals	14	2,296.7	2,951.6	7.53%	**128.5%**
Soaps, cosmetics	7	799.0	984.4	7.44%	**123.2%**
Office equip. (incl. computers)	9	9,652.9	11,689.1	7.68%	**121.1%**
Industrial & farm equipment	22	3,383.6	4,027.2	7.88%	**119.0%**
Music instr., toys, sporting goods	3	285.6	428.0	7.97%	**149.9%**
Beverages	8	815.4	1,011.3	8.54%	**124.0%**
By Service Group					
Commercial banking	33	$ 3,905.5	$ 5,319.4	7.88%	**136.2%**
Retailing	23	3,498.5	4,571.5	7.91%	**130.7%**
Transportation	16	2,683.4	3,739.8	7.98%	**139.4%**
Utilities	36	34,138.7	49,095.3	7.82%	**143.8%**
Total	108	$44,226.1	$62,726.0	7.88%	**141.8%**

Net Assets = Less Than 100% of TAB					Combined Figures—All Companies		
Number of Companies	Total Accumulated Benefits ($ Millions)	Total Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent of TAB (Composite)	Number of Companies	Interest Assumption (Average)	NA as a Percent of TAB (Adjusted Composite)
26	$59,404.3	$48,720.8	8.42%	82.0%	86	8.20%	91.6%
36	15,557.5	12,839.7	8.16%	82.5%	87	8.20%	90.4%
27	5,078.4	4,124.4	7.49%	81.2%	73	7.71%	90.5%
29	4,129.7	3,077.1	7.68%	74.5%	79	7.69%	85.8%
24	1,577.7	1,298.5	7.18%	82.3%	77	7.59%	91.5%
142	$85,747.6	$70,060.5	7.82%	81.7%	402	7.89%	91.1%
1	$ 98.6	$ 82.9	6.50%	84.1%	7	7.36%	96.8%
17	2,505.7	2,037.4	8.17%	81.3%	42	8.03%	92.9%
1	410.2	335.6	8.00%	81.8%	3	7.83%	95.2%
2	75.0	44.5	7.50%	59.3%	10	8.10%	96.2%
3	196.3	162.8	7.20%	82.9%	10	7.36%	95.5%
0	0.0	0.0	0.00%	0.0%	1	9.75%	100.0%
12	2,446.0	2,247.7	7.51%	91.9%	29	8.04%	96.6%
0	0.0	0.0	0.00%	0.0%	11	7.45%	100.0%
8	3,145.6	2,888.6	7.50%	91.8%	33	8.00%	98.2%
4	954.9	893.3	7.18%	93.6%	31	7.60%	99.7%
4	2,927.6	2,357.4	9.30%	80.5%	6	10.18%	84.1%
1	79.4	57.6	8.00%	72.5%	1	8.00%	72.5%
7	1,666.5	1,396.3	8.21%	83.8%	13	8.46%	91.6%
20	15,437.5	12,095.0	8.55%	78.3%	26	8.48%	79.6%
10	2,733.9	2,540.1	7.90%	92.9%	24	7.96%	95.3%
9	4,591.3	3,827.1	7.66%	83.4%	25	7.70%	95.0%
4	970.3	713.8	6.90%	73.6%	4	6.90%	73.6%
5	455.1	415.6	7.20%	91.3%	16	7.55%	99.1%
10	34,910.9	27,183.3	8.27%	77.9%	14	8.20%	78.9%
4	4,519.0	4,379.8	7.63%	96.9%	13	7.72%	99.0%
3	1,190.4	1,060.1	7.50%	89.1%	17	7.52%	96.3%
0	0.0	0.0	0.00%	0.0%	7	7.44%	100.0%
2	908.4	796.4	6.75%	87.7%	11	7.51%	98.9%
13	5,503.6	4,525.3	7.15%	82.2%	35	7.60%	89.0%
1	2.5	1.8	8.00%	72.0%	4	7.98%	99.7%
1	18.7	18.0	6.00%	96.3%	9	8.26%	99.9%
5	$ 305.3	$ 285.8	6.65%	93.6%	38	7.71%	99.5%
11	579.6	479.3	7.55%	82.7%	34	7.79%	97.5%
12	4,199.6	3,219.6	7.33%	76.7%	28	7.70%	85.8%
11	3,909.1	3,539.0	7.73%	90.5%	47	7.80%	99.0%
39	$ 8,993.6	$ 7,523.7	7.42%	83.7%	147	7.76%	97.2%

8.

"Unfunded vested benefits represent less than 10 percent of net worth at 95 percent of the Fortune 500 companies."

Unfunded Vested Benefits As a Percentage of Net Worth, 1982

The information presented in Exhibit 8 on pages 34 and 35 provides some measure of the potential strain on the composite company's resources that would occur if the company had to immediately fund 100 percent of total vested benefits. The exercise is more than theoretical because in the event of an actual plan termination, a company can become liable (on account of certain unfunded vested benefits) to the Pension Benefit Guaranty Corporation for up to 30 percent of its net worth. Only 11 of the 615 companies shown in Exhibit 8 have a value of unfunded vested benefits that exceeds 30 percent of the company's net worth. For the composite Industrial company, unfunded vested benefits represented only 1.5 percent of its net worth in 1982, down from the 1.7 percent of 1981 shown in last year's Executive Report. For the Service companies, the ratio has not changed from last year (0.4 percent).

We also compute the composite ratio of unfunded vested benefits to net worth for *only* those companies that have unfunded vested benefits. For the 100 Industrial companies that are not fully funded with respect to total vested benefits, the composite company would need to liquidate 9.9 percent of its net worth in order to fully fund its total vested benefits. (Note, however, that only 25 of these 100 companies have a ratio of 10 percent or higher.) For the 23 Service companies that have unfunded vested benefits, only 3.6 percent of the composite company's net worth would be required to fully fund its vested benefits.

Unfunded Vested Benefits as a Percent of Net Worth, 1982

Fortune 500 Companies
Average: 1.5%

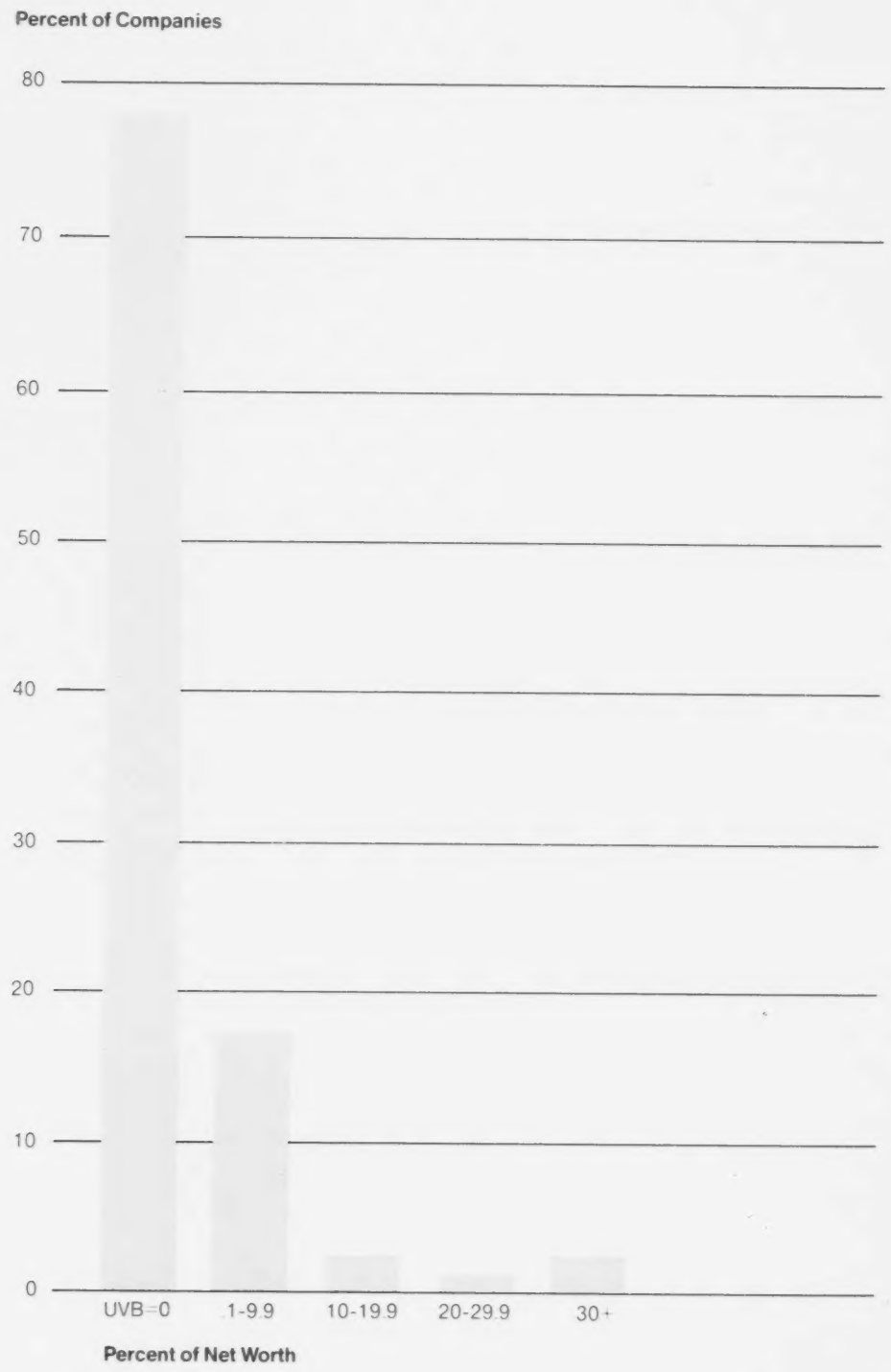

Exhibit 8

Unfunded Vested Benefits (UVB) As a Percentage of Net Worth, 1982

By Fortune 500 Rank		Number of Companies	UVB ($ Millions)	Net Worth ($ Millions)
Fortune 1-100		95	$ 5,269.5	$385,643.8
Fortune 101-200		98	1,770.8	100,832.3
Fortune 201-300		84	661.2	47,315.5
Fortune 301-400		88	739.6	27,628.3
Fortune 401-500		85	214.3	14,748.7
	Total	450	$ 8,655.4	$576,168.6
By Industry Group				
Mining, crude oil production		9	$ 15.1	$ 10,302.8
Food		49	334.9	30,828.8
Tobacco		3	46.7	11,201.2
Textiles, vinyl flooring		10	24.8	4,053.8
Apparel		11	19.9	5,478.5
Furniture		1	0.0	192.6
Paper, fiber, and wood products		30	87.3	25,843.7
Publishing, printing		13	0.0	7,410.7
Chemicals		36	107.1	50,542.3
Petroleum refining		35	5.0	168,055.9
Rubber, plastic products		9	451.0	6,820.4
Leather		1	20.7	92.4
Glass, concrete, abrasives, gypsum		15	141.7	9,757.9
Metal manufacturing		27	2,126.7	21,745.6
Metal products		25	87.6	10,880.8
Electronics, appliances		33	297.3	38,795.1
Shipbuilding, railrd., trans. equip.		5	192.7	2,134.7
Measuring, scient., photo equip.		16	16.4	20,075.7
Motor vehicles		15	3,979.6	32,232.5
Aerospace		15	18.6	16,222.7
Pharmaceuticals		18	58.8	24,243.2
Soaps, cosmetics		7	0.0	5,194.0
Office equip. (incl. computers)		11	0.0	37,020.5
Industrial & farm equipment		41	622.3	27,371.7
Music instr., toys, sporting goods		4	0.4	1,157.0
Beverages		11	1.0	8,516.0
By Service Group				
Commercial banking		46	$ 1.2	$ 49,169.3
Retailing		35	48.3	30,701.0
Transportation		35	979.6	27,446.0
Utilities		49	86.9	171,502.1
	Total	165	$ 1,116.0	$278,818.4

UVB as a Percent of Net Worth (Composite)	Number of Companies (Percent of Sample)					Companies Where UVB Exists	
	UVB=0	UVB=.1-9.9% of Net Worth	UVB=10-19.9% of Net Worth	UVB=20-29.9% of Net Worth	UVB=At Least 30% of Net Worth	Number of Companies	UVB as a Percent of Net Worth (Composite)
1.4%	80 (84%)	10 (11%)	2 (2%)	0 (0%)	3 (3%)	15	11.7%
1.8%	78 (80%)	14 (14%)	3 (3%)	1 (1%)	2 (2%)	20	9.3%
1.4%	63 (75%)	19 (23%)	0 (0%)	1 (1%)	1 (1%)	21	5.3%
2.7%	63 (72%)	15 (17%)	5 (6%)	3 (3%)	2 (2%)	25	9.8%
1.5%	66 (78%)	17 (20%)	0 (0%)	1 (1%)	1 (1%)	19	6.6%
1.5%	350 (78%)	75 (17%)	10 (2%)	6 (1%)	9 (2%)	100	9.9%
0.1%	7 (78%)	2 (22%)	0 (0%)	0 (0%)	0 (0%)	2	1.3%
1.1%	38 (78%)	9 (18%)	0 (0%)	1 (2%)	1 (2%)	11	5.1%
0.4%	2 (67%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	1	2.2%
0.6%	8 (80%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)	2	4.5%
0.4%	9 (82%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	2	1.7%
0.0%	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	0.0%
0.3%	24 (80%)	6 (20%)	0 (0%)	0 (0%)	0 (0%)	6	2.6%
0.0%	13 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	0.0%
0.2%	30 (83%)	6 (17%)	0 (0%)	0 (0%)	0 (0%)	6	1.6%
0.0%	32 (91%)	3 (9%)	0 (0%)	0 (0%)	0 (0%)	3	0.3%
6.6%	7 (78%)	1 (11%)	0 (0%)	0 (0%)	1 (11%)	2	68.9%
22.4%	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	1	22.4%
1.5%	7 (47%)	6 (40%)	1 (7%)	1 (7%)	0 (0%)	8	2.9%
9.8%	14 (52%)	5 (19%)	4 (15%)	1 (4%)	3 (11%)	13	15.6%
0.8%	20 (80%)	5 (20%)	0 (0%)	0 (0%)	0 (0%)	5	4.2%
0.8%	25 (76%)	5 (15%)	2 (6%)	1 (3%)	0 (0%)	8	5.6%
9.0%	2 (40%)	1 (20%)	1 (20%)	1 (20%)	0 (0%)	3	13.1%
0.1%	14 (88%)	2 (13%)	0 (0%)	0 (0%)	0 (0%)	2	4.0%
12.3%	7 (47%)	3 (20%)	2 (13%)	0 (0%)	3 (20%)	8	17.5%
0.1%	14 (93%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	1	3.8%
0.2%	16 (89%)	2 (11%)	0 (0%)	0 (0%)	0 (0%)	2	1.9%
0.0%	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	0.0%
0.0%	11 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	0.0%
2.3%	29 (71%)	11 (27%)	0 (0%)	0 (0%)	1 (2%)	12	7.4%
0.0%	3 (75%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	1	0.5%
0.0%	10 (91%)	1 (9%)	0 (0%)	0 (0%)	0 (0%)	1	0.4%
0.0%	45 (98%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	1	0.4%
0.2%	30 (86%)	4 (11%)	1 (3%)	0 (0%)	0 (0%)	5	2.4%
3.6%	24 (69%)	8 (23%)	1 (3%)	0 (0%)	2 (6%)	11	8.8%
0.1%	43 (88%)	6 (12%)	0 (0%)	0 (0%)	0 (0%)	6	0.5%
0.4%	142 (86%)	19 (12%)	2 (1%)	0 (0%)	2 (1%)	23	3.6%

9.

"Sixteen industry groups had unfunded accumulated benefits that were less than one percent of net worth."

Unfunded Total Accumulated Benefits As a Percentage of Net Worth, 1982

The ratios shown in Exhibit 9 on pages 38 and 39 are slightly higher than corresponding figures in Exhibit 8 because the value of nonvested benefits is included in the calculation of unfunded total accumulated benefits. The 154 Industrials that had unfunded accumulated benefits would need 11 percent of their composite net worth to fully fund such benefits. For the 42 Service firms with unfunded total accumulated benefits, 3.4 percent of their composite net worth would be required to fully fund such benefits.

The motor vehicles group was most affected by the inclusion of nonvested benefits; its composite ratio (24 percent) is nearly double the composite ratio shown in Exhibit 8 with respect to unfunded vested benefits. On the brighter side—only thirteen companies in Exhibit 9 had a ratio over 30 percent, two more than had a ratio over 30 percent with respect to vested benefits in Exhibit 8.

On the whole, the present value of total accumulated benefits not covered by plan assets is not large enough to constitute a potential problem to the composite company in our survey.

Unfunded Total Accumulated Benefits as a Percent of Net Worth, 1982

Exhibit 9

Unfunded Total Accumulated Benefits (UTAB) As a Percentage of Net Worth, 1982

By Fortune 500 Rank	Number of Companies	UTAB ($ Millions)	Net Worth ($ Millions)
Fortune 1-100	95	$10,683.4	$385,643.8
Fortune 101-200	98	3,018.5	100,832.3
Fortune 201-300	84	1,019.4	47,315.5
Fortune 301-400	88	1,076.2	27,628.3
Fortune 401-500	85	306.5	14,748.7
Total	450	$16,104.0	$576,168.6
By Industry Group			
Mining, crude oil production	9	$ 24.0	$ 10,302.8
Food	49	468.4	30,828.8
Tobacco	3	74.6	11,201.2
Textiles, vinyl flooring	10	30.6	4,053.8
Apparel	11	33.5	5,478.5
Furniture	1	0.0	192.6
Paper, fiber, and wood products	30	198.2	25,843.7
Publishing, printing	13	0.0	7,410.7
Chemicals	36	268.7	50,542.3
Petroleum refining	35	63.6	168,055.9
Rubber, plastic products	9	570.2	6,820.4
Leather	1	21.8	92.4
Glass, concrete, abrasives, gypsum	15	434.5	9,757.9
Metal manufacturing	27	3,342.5	21,745.6
Metal products	25	193.7	10,880.8
Electronics, appliances	33	884.4	38,795.1
Shipbuilding, railrd., trans. equip.	5	256.6	2,134.7
Measuring, scient., photo equip.	16	39.5	20,075.7
Motor vehicles	15	7,727.6	32,232.5
Aerospace	15	139.3	16,222.7
Pharmaceuticals	18	130.3	24,243.2
Soaps, cosmetics	7	0.0	5,194.0
Office equip. (incl. computers)	11	112.0	37,020.5
Industrial & farm equipment	41	1,084.3	27,371.7
Music instr., toys, sporting goods	4	0.7	1,157.0
Beverages	11	5.1	8,516.0
By Service Group			
Commercial banking	46	$ 19.5	$ 49,169.3
Retailing	35	109.7	30,701.0
Transportation	35	1,199.3	27,446.0
Utilities	49	387.7	171,502.1
Total	165	$ 1,716.2	$278,818.4

UTAB as a Percent of Net Worth (Composite)	Number of Companies (Percent of Sample)					Companies Where UTAB Exists	
	UTAB=0	UTAB=.1-9.9% of Net Worth	UTAB=10-19.9% of Net Worth	UTAB=20-29.9% of Net Worth	UTAB=At Least 30% of Net Worth	Number of Companies	UTAB as a Percent of Net Worth (Composite)
2.8%	69 (73%)	18 (19%)	3 (3%)	1 (1%)	4 (4%)	26	14.0%
3.0%	58 (59%)	30 (31%)	5 (5%)	3 (3%)	2 (2%)	40	7.7%
2.2%	54 (64%)	26 (31%)	2 (2%)	1 (1%)	1 (1%)	30	6.2%
3.9%	57 (65%)	19 (22%)	3 (3%)	6 (7%)	3 (3%)	31	10.6%
2.1%	58 (68%)	23 (27%)	2 (2%)	1 (1%)	1 (1%)	27	6.6%
2.8%	293 (66%)	116 (26%)	15 (3%)	12 (3%)	11 (2%)	154	11.0%
0.2%	7 (78%)	2 (22%)	0 (0%)	0 (0%)	0 (0%)	2	2.0%
1.5%	32 (65%)	15 (31%)	0 (0%)	1 (2%)	1 (2%)	17	4.1%
0.7%	2 (67%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	1	3.5%
0.8%	8 (80%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)	2	5.5%
0.6%	8 (73%)	3 (27%)	0 (0%)	0 (0%)	0 (0%)	3	2.7%
0.0%	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	0.0%
0.8%	18 (60%)	11 (37%)	1 (3%)	0 (0%)	0 (0%)	12	2.1%
0.0%	13 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	0.0%
0.5%	27 (75%)	9 (25%)	0 (0%)	0 (0%)	0 (0%)	9	2.0%
0.0%	30 (86%)	5 (14%)	0 (0%)	0 (0%)	0 (0%)	5	0.7%
8.4%	5 (56%)	2 (22%)	1 (11%)	0 (0%)	1 (11%)	4	13.8%
23.6%	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	1	23.6%
4.5%	6 (40%)	5 (33%)	2 (13%)	2 (13%)	0 (0%)	9	8.5%
15.4%	7 (26%)	11 (41%)	2 (7%)	3 (11%)	4 (15%)	20	17.6%
1.8%	15 (60%)	10 (40%)	0 (0%)	0 (0%)	0 (0%)	10	3.7%
2.3%	22 (67%)	7 (22%)	1 (3%)	2 (6%)	1 (3%)	11	12.4%
12.0%	1 (20%)	2 (40%)	1 (20%)	1 (20%)	0 (0%)	4	16.1%
0.2%	11 (69%)	5 (31%)	0 (0%)	0 (0%)	0 (0%)	5	2.1%
24.0%	5 (33%)	2 (13%)	3 (20%)	2 (13%)	3 (20%)	10	26.7%
0.9%	11 (73%)	3 (20%)	1 (7%)	0 (0%)	0 (0%)	4	3.0%
0.5%	15 (83%)	3 (18%)	0 (0%)	0 (0%)	0 (0%)	3	2.9%
0.0%	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	0.0%
0.3%	9 (82%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	2	4.4%
4.0%	24 (59%)	14 (34%)	2 (5%)	0 (0%)	1 (2%)	17	8.4%
0.1%	3 (75%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	1	0.8%
0.1%	9 (82%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	2	1.2%
0.0%	41 (89%)	5 (11%)	0 (0%)	0 (0%)	0 (0%)	5	0.6%
0.4%	23 (66%)	10 (29%)	2 (6%)	0 (0%)	0 (0%)	12	2.5%
4.4%	22 (63%)	10 (29%)	0 (0%)	1 (3%)	2 (6%)	13	10.1%
0.2%	37 (76%)	12 (24%)	0 (0%)	0 (0%)	0 (0%)	12	1.2%
0.6%	123 (75%)	37 (22%)	2 (1%)	1 (1%)	2 (1%)	42	3.4%

10.

"Only 48 of the Fortune 500 companies have unfunded vested benefits after adjusting to a uniform 9¼ percent interest rate assumption."

Effect of Interest Rate Assumption on Unfunded Vested Benefits (UVB), 1982

For each company included in Exhibit 10 on pages 42 and 43, we applied a formula (based on each company's FASB Statement Number 36 interest rate) to the company's reported value of total vested benefits. The formula actuarially adjusts the value of benefits for changes in the assumed rate of interest; hence the adjusted values represent our estimate of each company's total vested benefits on alternative interest rate assumptions. The revised value of vested benefits on each alternative basis is compared to the actual value of plan assets as disclosed by each company. The resulting figures for the value of total vested benefits on each of two alternative interest rate assumptions are shown in Exhibit 10, together with a tabulation of the actual unfunded vested benefits reported by the companies.

The lower uniform interest rate of 7 percent was chosen because it was the most frequently disclosed interest rate below the overall Industrial average interest rate of 7.83 percent. Because the use of a lower rate results in a higher liability, the aggregate amount of unfunded vested benefits increased on the basis of this generally lower uniform interest rate of 7 percent. Most of the increase is attributable to a small percentage of companies, many of which used relatively high interest rates in calculating the actual value of total vested benefits as disclosed in their annual report. This trend is evidenced by the fact that about 84 percent of the companies that had no unfunded vested benefits before the adjustment (438 companies) continue to have no unfunded vested benefits after the adjustment (367 companies). The remaining 16 percent of the companies account for all of the estimated increase in unfunded vested benefits, with most of the increase occurring in the motor vehicles group.

The second alternative interest rate selected was 9¼ percent, the approximate rate that would have been applied by the Pension Benefit Guaranty Corporation in the event of a plan termination on December 31, 1982. Our estimate of the total value of unfunded vested benefits on this basis exceeds the value of *actual* amounts disclosed by the Industrial companies because of the effect of one *very* large company which uses an FASB interest rate assumption above 9¼ percent. Eighty-nine percent of the Industrial and Service companies represented in the Exhibit have no unfunded vested benefits on the basis of a uniform interest rate assumption of 9¼ percent.

One of the chief inferences to be drawn from Exhibit 10 is that the overwhelming majority of companies in our study are very adequately funded whether the various plans adopt a 7 percent interest rate assumption, a 9¼ percent interest rate assumption, or a value between the two. There continue to be a few firms, however, that are below average in funding, some of which tend to use above-average interest rates for FASB Statement Number 36 purposes. Accordingly, these particular firms should not be singled out to represent the typical funding costs and liabilities of large corporate pension plans.

Percentage of Companies with Fully Funded Benefits, 1982 and 1981

	Industrial Companies		Service Companies		All Companies	
	1982	1981	1982	1981	1982	1981
Uniform 7% Interest Rate	63%	66%	76%	80%	67%	69%
Actual (Reported) Interest Rate	78%	71%	85%	81%	80%	74%
Uniform 9¼% Interest Rate	88%	–	92%	–	89%	–
Uniform 10% Interest Rate	–	93%	–	96%	–	94%

Exhibit 10

Effect of Interest Assumption on Unfunded Vested Benefits (UVB), 1982

By Fortune 500 Rank	Number of Companies	Lowest FASB Interest	Highest FASB Interest	Average FASB Interest	Number of Companies with UVB=0
Fortune 1-100	86	5.50%	15.90%	8.18%	71
Fortune 101-200	87	6.00%	12.80%	8.20%	69
Fortune 201-300	73	5.00%	14.00%	7.71%	55
Fortune 301-400	79	5.00%	11.75%	7.69%	56
Fortune 401-500	77	5.50%	10.10%	7.59%	61
Total	402	5.00%	15.90%	7.89%	312
By Industry Group					
Mining, crude oil production	7	6.00%	9.00%	7.36%	6
Food	42	5.50%	13.00%	8.03%	31
Tobacco	3	7.50%	8.00%	7.83%	2
Textiles, vinyl flooring	10	7.00%	10.00%	8.10%	8
Apparel	10	6.00%	10.00%	7.36%	8
Furniture	1	9.75%	9.75%	9.75%	1
Paper, fiber, and wood products	29	6.00%	10.10%	8.04%	23
Publishing, printing	11	6.50%	8.00%	7.45%	11
Chemicals	33	6.00%	14.00%	8.00%	27
Petroleum refining	31	5.50%	10.00%	7.60%	29
Rubber, plastic products	6	8.00%	15.90%	10.18%	4
Leather	1	8.00%	8.00%	8.00%	0
Glass, concrete, abrasives, gypsum	13	7.00%	10.00%	8.46%	7
Metal manufacturing	26	6.00%	11.75%	8.48%	13
Metal products	24	6.00%	10.00%	7.96%	19
Electronics, appliances	25	6.00%	10.20%	7.71%	19
Shipbuilding, railrd., trans. equip.	4	6.10%	7.50%	6.90%	1
Measuring, scient., photo equip.	16	6.50%	9.00%	7.55%	14
Motor vehicles	14	6.00%	10.25%	8.20%	6
Aerospace	13	6.00%	8.60%	7.72%	12
Pharmaceuticals	17	5.00%	10.50%	7.52%	15
Soaps, cosmetics	7	6.50%	9.30%	7.44%	7
Office equip. (incl. computers)	11	5.50%	10.25%	7.51%	11
Industrial & farm equipment	35	5.00%	11.50%	7.60%	26
Music instr., toys, sporting goods	4	7.00%	8.90%	7.98%	3
Beverages	9	6.00%	10.50%	8.26%	9
By Service Group					
Commercial banking	38	5.50%	10.50%	7.71%	37
Retailing	34	6.00%	10.50%	7.79%	29
Transportation	29	5.00%	11.00%	7.68%	18
Utilities	47	5.00%	14.00%	7.80%	42
Total	148	5.00%	14.00%	7.75%	126

Actual Basis			Seven Percent Basis			PBGC (9¼ Percent) Basis		
						As of December 31, 1982		
Number of Companies with UVB	Average FASB Interest if UVB Exists	Actual UVB ($ Millions)	Number of Companies with UVB=0	Number of Companies with UVB	UVB ($ Millions)	Number of Companies with UVB=0	Number of Companies with UVB	UVB ($ Millions)
15	8.84%	$5,269.5	52	34	$19,826.7	75	11	$7,017.1
18	7.74%	1,702.6	47	40	3,987.3	75	12	1,210.2
18	7.59%	616.0	49	24	936.4	67	6	184.2
23	7.90%	732.1	53	26	1,160.4	67	12	418.6
16	7.16%	204.6	53	24	268.9	70	7	85.3
90	7.83%	$8,524.8	254	148	$26,179.7	354	48	$8,915.4
1	6.50%	$ 9.3	5	2	$ 4.0	7	0	$ 0.0
11	7.67%	334.9	22	20	821.6	34	8	125.4
1	8.00%	46.7	2	1	92.2	3	0	0.0
2	7.50%	24.8	6	4	32.6	8	2	10.9
2	7.80%	19.9	7	3	80.8	10	0	0.0
0	0.00%	0.0	1	0	0.0	1	0	0.0
6	7.29%	87.3	16	13	389.0	29	0	0.0
0	0.00%	0.0	11	0	0.0	11	0	0.0
6	7.59%	107.1	24	9	329.2	33	0	0.0
2	7.51%	4.3	26	5	1,582.9	31	0	0.0
2	8.60%	451.0	1	5	1,256.3	2	4	605.5
1	8.00%	20.7	0	1	30.0	0	1	9.0
6	8.25%	125.2	4	9	380.3	10	3	55.8
13	8.69%	2,126.7	8	18	5,697.6	15	11	2,335.9
5	7.80%	87.6	14	10	525.6	22	2	32.9
6	7.54%	234.6	15	10	982.1	21	4	47.0
3	7.17%	192.7	1	3	220.6	2	2	35.8
2	7.00%	16.4	12	4	70.8	16	0	0.0
8	8.59%	3,979.6	5	9	12,480.4	8	6	5,499.7
1	8.51%	18.6	11	2	66.1	13	0	0.0
2	7.00%	58.8	13	4	142.2	17	0	0.0
0	0.00%	0.0	7	0	0.0	7	0	0.0
0	0.00%	0.0	9	2	124.6	11	0	0.0
9	7.14%	578.4	23	12	862.9	31	4	157.4
1	8.00%	0.4	3	1	0.7	3	1	0.1
0	0.00%	0.0	8	1	7.2	9	0	0.0
1	7.02%	$ 1.2	35	3	$ 47.7	38	0	$ 0.0
5	7.70%	48.3	26	8	135.2	30	4	18.2
11	7.14%	1,042.7	16	13	1,487.1	23	6	478.1
5	6.81%	79.0	36	11	330.9	45	2	38.8
22	7.18%	$1,171.2	113	35	$ 2,000.9	136	12	$ 535.1

Appendix A

Table 1

Unfunded Vested Benefits (UVB) by FASB Interest Rate—1982 and 1981

FASB Interest Assumption	Total Number of Companies		Number of Companies with UVB=0		Number of Companies with UVB		Total UVB ($ Millions)	
	1982	1981	1982	1981	1982	1981	1982	1981
5.00– 5.49	4	11	3	6	1	5	21.1	44.2
5.50– 5.99	9	14	9	10	–	4	0.0	9.8
6.00– 6.49	44	68	34	53	10	15	375.8	655.1
6.50– 6.99	38	52	32	38	6	14	204.4	393.5
7.00– 7.49	106	111	77	76	29	35	2,124.3	2,664.4
7.50– 7.99	64	50	51	37	13	13	518.8	626.9
8.00– 8.49	111	93	87	64	24	29	1,239.6	2,033.3
8.50– 8.99	31	39	26	29	5	10	128.8	760.6
9.00– 9.49	48	46	36	34	12	12	1,061.7	1,598.9
9.50– 9.99	17	8	14	8	3	–	69.5	0.0
10.00–10.99	43	27	38	20	5	7	3,888.7	3,183.1
11.00–11.99	5	1	4	1	1	–	42.7	0.0
12.00–12.99	1	2	1	2	–	–	0.0	0.0
13.00–13.99	1	1	1	1	–	–	0.0	0.0
14.00–14.99	2	2	2	2	–	–	0.0	0.0
15.00–15.99	1	–	1	–	–	–	0.0	0.0

Appendix B

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 500 Industrials

Abbott Laboratories
ACF Industries
Agway
Air Products & Chemicals
Allegheny International
Allied
Allis-Chalmers
Aluminum Co. of America
AM International
Amdahl
Amerada Hess
American Bakeries
American Brands
American Can
American Cyanamid
American Greetings
American Hoist & Derrick
American Home Products
American Motors
American Petrofina
American Standard
AMF
AMP
Ametek
Ampco-Pittsburgh
Amstar
Amsted Industries
Anchor Hocking
Anderson Clayton
Anheuser-Busch
Apple Computer
Archer-Daniels-Midland
Armco
Armstrong Rubber
Armstrong World Industries
Arvin Industries
Asarco
Ashland Oil
Atlantic Richfield
Avery International
Avon Products
Baker International
Ball
Bangor Punta
Barnes Group
Bausch & Lomb
Baxter Travenol Laboratories
Beatrice Foods
Becton Dickinson
Bell & Howell
Bemis
Bendix
Bethlehem Steel
Big Three Industries
Black & Decker Manufacturing
Blue Bell
Boeing
Boise Cascade
Borden
Borg-Warner
Briggs & Stratton
Bristol-Myers
Brockway Glass
Brown-Forman Distillers
Brunswick
Bucyrus-Erie
Burlington Industries
Burroughs
Butler Manufacturing
Cabot
Cameron Iron Works
Campbell Soup
Capital Cities Communications
Carnation
Carpenter Technology
Caterpillar Tractor
CBI Industries
Ceco
Celanese
Central Soya
CertainTeed
Cessna Aircraft
Champion International
Champion Spark Plug
Charter
Chesebrough-Pond's
Chromalloy American
Chrysler
Cincinnati Milacron
Clark Equipment
Clorox
Cluett Peabody
Coastal
Coca-Cola
Coleco Industries
Colgate-Palmolive
Collins & Aikman
Colt Industries
Combustion Engineering
Comercia
ConAgra
Cone Mills
Consolidated Foods
Consolidated Papers
Continental Group
Control Data
Cooper Industries
Cooper Tire & Rubber
Coors (Adolph)
Corning Glass Works
CPC International
Crane
Crown Central Petroleum
Crown Cork & Seal
Crown Zellerbach
Cummins Engine
Cyclops
Dana
Dart & Kraft
Data General
Datapoint
Dayco
Dean Foods
Deere
Deluxe Check Printers
Dennison Manufacturing
Dexter
Diamond Shamrock
Diebold Inc.
Digital Equipment
Donnelly (R.R.) & Sons
Dorsey
Dover
Dow Chemical
Dow Corning
Dow Jones
Dr. Pepper
Dresser Industries
DuPont (E.I.) de Nemours
E-Systems
Eagle-Picher Industries
EASCO
Eastman Kodak
Eaton
Echlin
Economics Laboratory
EG&G
Emerson Electric
Emhart
Engelhard
Esmark
Ethyl
Ex-Cell-O
Exxon
Fairchild Industries
Federal
Federal Paper Board
Federal-Mogul
Ferro
Fieldcrest Mills
Figgie International
Firestone Tire & Rubber
Fleetwood Enterprises
Flowers Industries
FMC
Ford Motor
Fort Howard Paper
Foster Wheeler
Foxboro
Frederick & Herrud
Freeport-McMoran
Fruehauf
Fuqua Industries
GAF
Gannett
Gates Learjet
GATX
General Cinema
General Dynamics
General Electric
General Foods
General Instrument
General Mills

Appendix B (Continued)

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 500 Industrials

General Motors
General Signal
General Tire & Rubber
Genesco
Georgia-Pacific
Gerber Products
Getty Oil
Gifford-Hill
Gillette
Gold Kist
Goodrich (B.F.)
Goodyear Tire & Rubber
Gould
Grace (W.R.)
Great Northern Nekoosa
Greyhound
Grumman
Gulf & Western Industries
Gulf Oil
Hammermill Paper
Handy & Harman
Harcourt Brace Jovanovich
Harnischfeger
Harris
Harsco
Hartmarx
Heileman (G.) Brewing
Heinz (H.J.)
Hercules
Hershey Foods
Hewlett-Packard
Holly
Honeywell
Hoover
Hoover Universal
Hormel (Geo. A.)
Hughes Tool
Hyster
IC Industries
Idle Wild Foods
Illinois Tool Works
Ingersoll-Rand
Inland Steel
Insilco
Intel
Interco
Interlake
International Business Machines
International Flavors & Fragrances
International Harvester
International Minerals & Chemical
International Multifoods
International Paper
International Telephone & Telegraph
Interstate Bakeries
James River Corp. of Va.
Johnson & Johnson
Johnson Controls
Joy Manufacturing
Kaiser Aluminum & Chemical
Kaiser Steel
Kane-Miller
Kellogg
Kellwood
Kerr Glass Manufacturing
Kerr-McGee
Kidde
Kimberly-Clark
Knight-Ridder Newspapers
Koppers
Lear Siegler
Levi Strauss
Libbey-Owens-Ford
Lilly (Eli)
Liquid Air
Litton Industries
Lockheed
Lone Star Industries
Louisiana Land & Exploration
Louisiana-Pacific
Lowenstein (M.)
LTV
Lubrizol
M/A-Com
Magic Chef
Manville
MAPCO
Marion
Marmon Group
Martin Marietta
Maryland Cup
Masco
Masonite
Mattel
May Tag
McCormick
McDermott
McDonnell Douglas
McGraw-Edison
McGraw-Hill
Media General
Mead
MEI
Merck
Meredith
Midland-Ross
Miles Laboratories
Minnesota Mining & Manufacturing
Mitchell Energy & Development
Mobil
Mohasco
Monfort of Colorado
Monsanto
Moore McCormack Resources
Morton Thiokol
Motorola
Murphy Oil
Nabisco
Nalco Chemical
Nashua
National Can
National Distillers & Chemical
National Gypsum
National Semiconductor
National Service Industries
National Steel
Natomas
NCR
New York Times
Newmont Mining
NL Industries
North American Coal
North American Philips
Northrop
Northwest Industries
Norton
Norton Simon
Nucor
NVF
Oak Industries
Occidental Petroleum
Ogden
Olin
Outboard Marine
Owens-Corning Fiberglas
Owens-Illinois
Oxford Industries
Pabst Brewing
Paccar
Pacific Resources
Palm Beach
Parker-Hannifin
Peabody International
Penn Central
Pennwalt
Pennzoil
PepsiCo
Perkin-Elmer
Pfizer
Phelps Dodge
Philip Morris
Phillips Petroleum
Phillips-Van Heusen
Pillsbury
Pitney-Bowes
Polaroid
Porter (H.K.)
Potlatch
PPG Industries
Prime Computer
Procter & Gamble
Quaker Oats
Quaker State Oil Refining
Ralston Purina
Rath Packing
Raychem
Raytheon

Appendix B (Continued)

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 500 Industrials

Reichhold Chemicals
Republic Steel
Research-Cottrell
Revere Copper & Brass
Revlon
Rexnord
Reynolds (R.J.) Industries
Reynolds Metals
Richardson-Vicks
Robertson (H.H.)
Robins (A.H.)
Rockwell International
Rohm & Haas
Rohr Industries
Roper
Royal Crown
Sanders Assoc. Inc.
Savannah Foods Industries
Schering-Plough
SCM
Scott & Fetzer
Scott Paper
Scovill
Searle (G.D.)
Shaklee
Shell Oil
Sheller-Globe
Sherwin-Williams
Signal Companies
Singer
Smith (A.O.)
Smith International
SmithKline
Snap-on Tools
Sonoco Products
Southwest Forest Industries
Sperry
Springs Industries
Square D
Squibb
St. Regis Paper
Staley (A.E.) Manufacturing
Standard Oil (Ind.)
Standard Oil (Ohio)
Standard Oil of California
Stanley Works
Stauffer Chemical
Sterling Drug
Stevens (J.P.)
Stokely-Van Camp
Stone Container
Storage Technology
Sun
Sun Chemical
Sundstrand
Superior Oil
Swift Independent
Sybron
Tecumseh Products
Tektronix
Teledyne
Tenneco
Texaco
Texas Instruments
Textron
Time Inc.
Times Mirror
Timken
Todd Shipyards
Tosco
Trane
Trinity Industries
TRW
Tyco Laboratories
Tyler
Tyson Foods
U.S. Gypsum
U.S. Industries
U.S. Steel
Union Camp
Union Carbide
Union Oil of California
Union Pacific
Uniroyal
United Brands
United Merchants & Manufacturers
United Technologies
Upjohn
Varian Associates
VF
Vulcan Materials
Walter (Jim)
Wang Laboratories
Warnaco
Warner Communications
Warner-Lambert
Washington Post
West Point-Pepperell
Western Electric
Westinghouse Electric
Westmoreland Coal
Westvaco
Weyerhaeuser
Wheeling-Pittsburgh Steel
Whirlpool
White Consolidated Industries
Willamette Industries
Williams Companies
Wilson Foods
Witco Chemical
Worthington Industries
Wrigley (Wm. Jr.)
Wyman-Gordon
Xerox
Zenith

Appendix B (Continued)

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 50 Largest Non-Industrials Commercial Banking Companies

AmeriTrust Corp.
BancOhio Corp.
Bank of Boston Corp.
Bank of New York Co.
BankAmerica Corp.
Bankers Trust New York Corp.
Barnett Banks of Florida
Centerre Bancorp
Chase Manhattan Corp.
Chemical New York Corp.
Citicorp
Comerica
Continental Illinois Corp.
Corestates Financial Corp.
Crocker National Corp.
First Bank System
First Chicago Corp.
First City Bancorp. of Texas
First Interstate Bancorp.
First Pennsylvania Corp.
First Union Corp.
Harris Bankcorp Inc.
Interfirst Corp.
Irving Bank Corp.
Manufacturers Hanover Corp.
Marine Midland Banks
Mellon National Corp.
Mercantile Texas Corp.
Michigan National Corp.
Morgan (J.P.)
National City Corp.
NBD Bancorp
NCNB Corp.
Northern Trust Corp.
Northwest Bancorp.
PNC Financial Corp.
Rainier Bancorp.
Republic New York Corp.
RepublicBank Corp.
Seafirst Corp.
Security Pacific Corp.
Southeast Banking Corp.
Texas Commerce Bancshares
U.S. Bancorp.
Valley National Bank of Arizona
Wachovia Corp.
Wells Fargo & Co.

From the Fortune 50 Largest Non-Industrials Retailing Companies

Albertson's
Allied Stores
American Stores
ARA Services
Associated Dry Goods
Carter Hawley Hale Stores
Dayton Hudson
Eckerd (Jack)
Federated Department Stores
First National Supermarkets
Fisher Foods
Giant Food
Great Atlantic & Pacific Tea
Jewel
K Mart
Kroger
Lucky Stores
Macy (R.H.)
Marriott
May Department Stores
McDonald's
Melville
Mercantile Stores
Pantry Pride
Penney (J.C.)
Pneumo
Rapid-American
Revco D.S.
Safeway Stores
SCOA Industries
Sears Roebuck
Service Merchandise
Southland
Stop & Shop Companies
Supermarkets General
Tandy Corp.
Thrifty
U.S. Shoe
Wal-mart Stores
Waldbaum
Walgreen
Winn-Dixie Stores
Woolworth (F.W.)
Zayre

Appendix B (Continued)

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 50 Largest Non-Industrials Transportation Companies

Alexander & Baldwin
AMR
ARCO Pipeline
Arkansas Best
Braniff International
Burlington Northern
Chicago & Northwestern Transportation
Chicago Milwaukee St. Paul RR
Consolidated Freightways
CSX
Delta Air Lines
Eastern Air Lines
Emery Air Freight
Exxon Pipeline
Federal Express
Frontier Holdings Inc.
Illinois Central Gulf RR
Kansas City Southern Industries
Leaseway Transportation
Missouri Pacific
Norfolk Southern
Northwest Airlines
Overseas Shipholding Group
Ozark Airlines
Pan American World Airways
Piedmont Aviation
PSA
Republic Airlines
Rio Grande Industries
RLC Corp.
Roadway Services, IInc.
Santa Fe Industries
Sohio Pipe Line
Southern Pacific
Southern Ry.
Telecom
Texas Air
Tiger International
Trans World Corp.
UAL
United Parcel Service
U.S. Air
Western Air Lines
World Airways
Yellow Freight System

From the Fortune 50 Largest Non-Industrials Utilities

Allegheny Power System
American Electric Power
American Natural Resources
American Telephone & Telegraph
Arizona Public Service
Baltimore Gas & Electric
Carolina Power & Light
Central & South West
Cleveland Electric Illuminating
Columbia Gas System
Commonwealth Edison
Consolidated Natural Gas
Consumers Power
Continental Telephone
Detroit Edison
Dominion Resources
Duke Power
El Paso
Enserch
Florida Power & Light
General Public Utilities
General Telephone & Electronics
Gulf States Utilities
Houston Industries
Illinois Power
Internorth
Long Island Lighting
Middle South Utilities
Niagara Mohawk Power
Northeast Utilities
Northern Indiana Public Service
Northern States Power
Ohio Edison
Pacific Gas & Electric
Pacific Lighting
Pacific Power & Light
Panhandle Eastern Pipe Line
Pennsylvania Power & Light
Philadelphia Electric
Public Service Co. of Indiana
Public Service Electric & Gas
Sonat
Southern California Edison
Southern Company
Texas Eastern Corp.
Texas Utilities
Transco Energy
Union Electric
United Telecommunications

About Employee Benefit Consulting at Johnson & Higgins

Johnson and Higgins has been providing employee benefit related consulting services for nearly half a century. Over that time, the scope and reach of our services have expanded to the point that today we provide guidance in all employee benefit related areas, including:

- Cost of retirement plans—near term by means of traditional actuarial valuations, and long term by means of the state-of-the-art financial forecasting model developed by our Winkelvoss division.

- Efficient design of retirement plans utilizing our computerized modeling tool —the Benefit Adequacy Index.

- Optimum relationship between cash and non-cash compensation employing the combined expertise of our staff and that of our subsidiary Sibson & Company.

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